



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Swartz *et al.*
Serial No. : 10/731,552
Filed : December 8, 2003
For : "METHOD AND APPARATUS FOR POST-EXPOSURE
DETERMINATION OF IONIZING RADIATION DOSE"
Examiner : unknown
Group Art Unit : unknown
Attorney's Docket No. : RRI-001

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Mail Stop: Missing Parts, Alexandria, Virginia 22313-1450 on: July 6, 2004.

Attorney for applicants: David Prashker

Signature: David Prashker

Date: July 6, 2004

REPLACEMENT DRAWING IN COMPLIANCE WITH
37 C.F.R. 1.84 and 1.121

Commissioner for Patents
P.O. Box 1450
Mail Stop: Missing Parts
Alexandria, Virginia 22313-1450

Dear Sir:

The Notice To file Missing Parts Of NonProvisional Application Filed
Under 37 C.F. R. 1.53(b), Filing Date Granted, as mailed March 11, 2004


and extended through July 11, 2004, states that the drawing originally submitted are not acceptable for specifically stated reasons; and that a Replacement Drawing in compliance with 37 C.F.R. 1.84 and 1.121 respectively is required.

Accordingly, applicants' undersigned attorney hereby encloses and respectfully submits a Replacement Drawing constituting Figs. 1-31 respectively for the instant application. This Replacement Drawing corrects all the previously-identified defects; and is believed to be in full compliance with 37 C.F.R. 1.84 and 1.121 respectively.

Respectfully submitted,

HAROLD M. SWARTZ
WILLIAM F.B. PUNCHARD
PIOTR M. STAREWICZ
TADEUSZ M. WALCZAK

Date: July 6, 2004
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Tel.: (978) 525-3794

By: 
David Prashker
Reg. No. 29,693
Attorney for applicants

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Fig. 1A

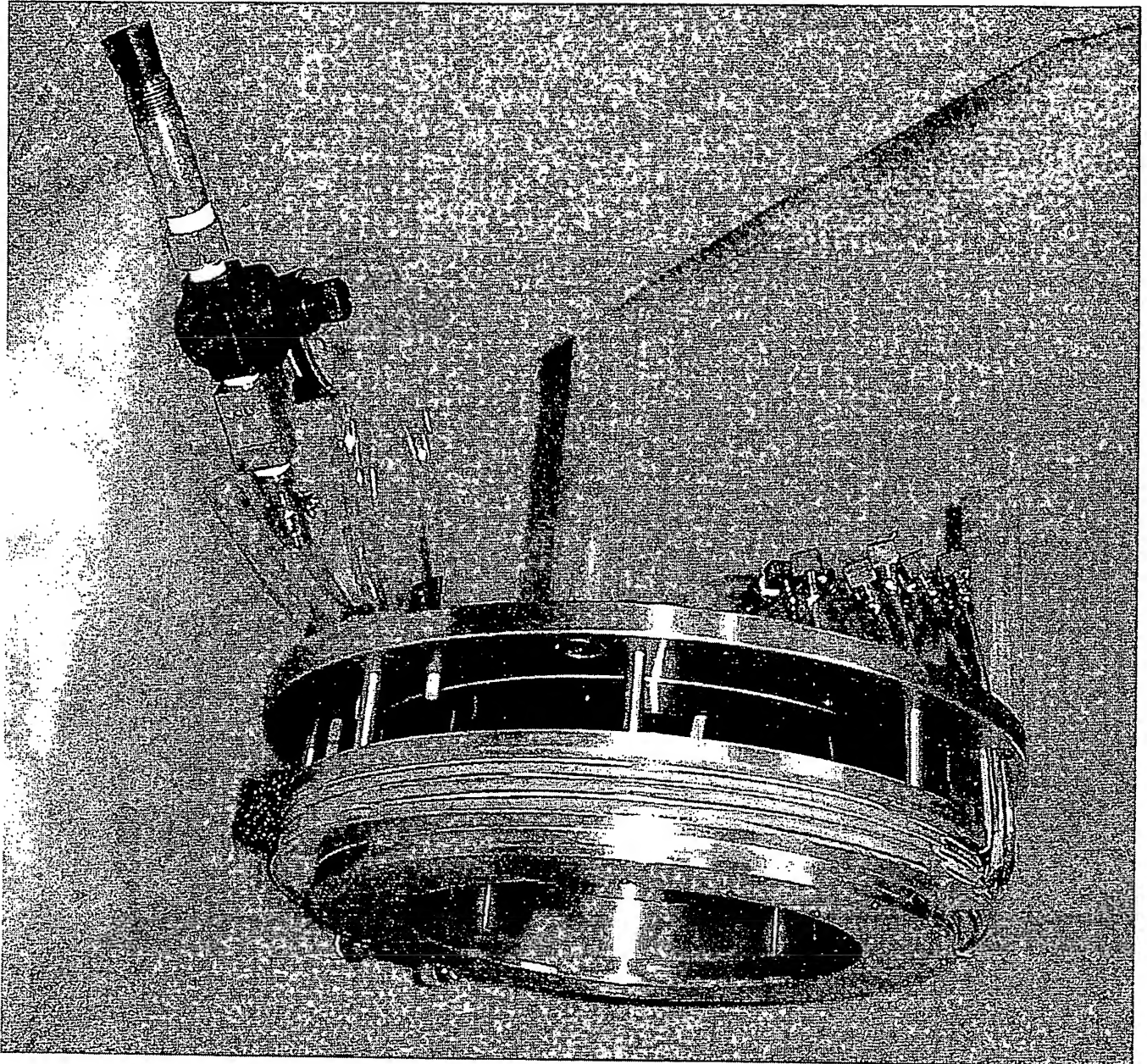


Fig. 1B

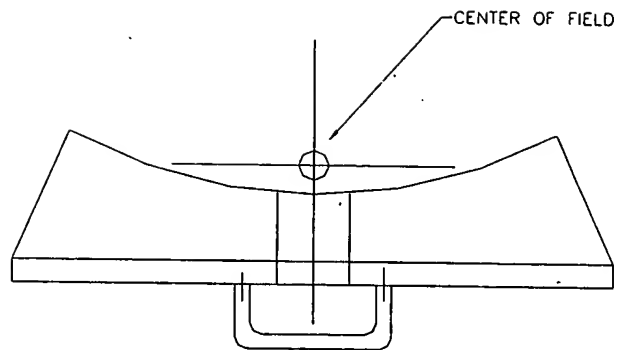


Fig. 1C

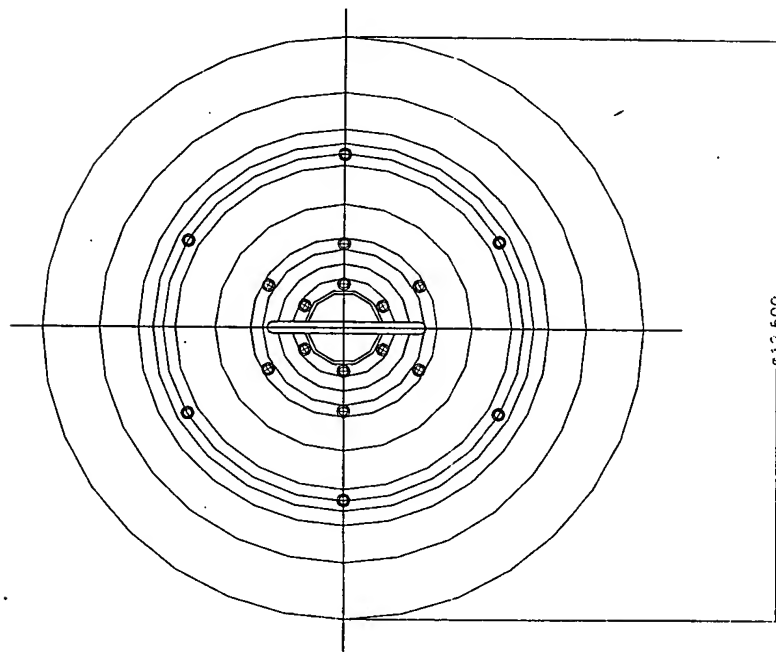
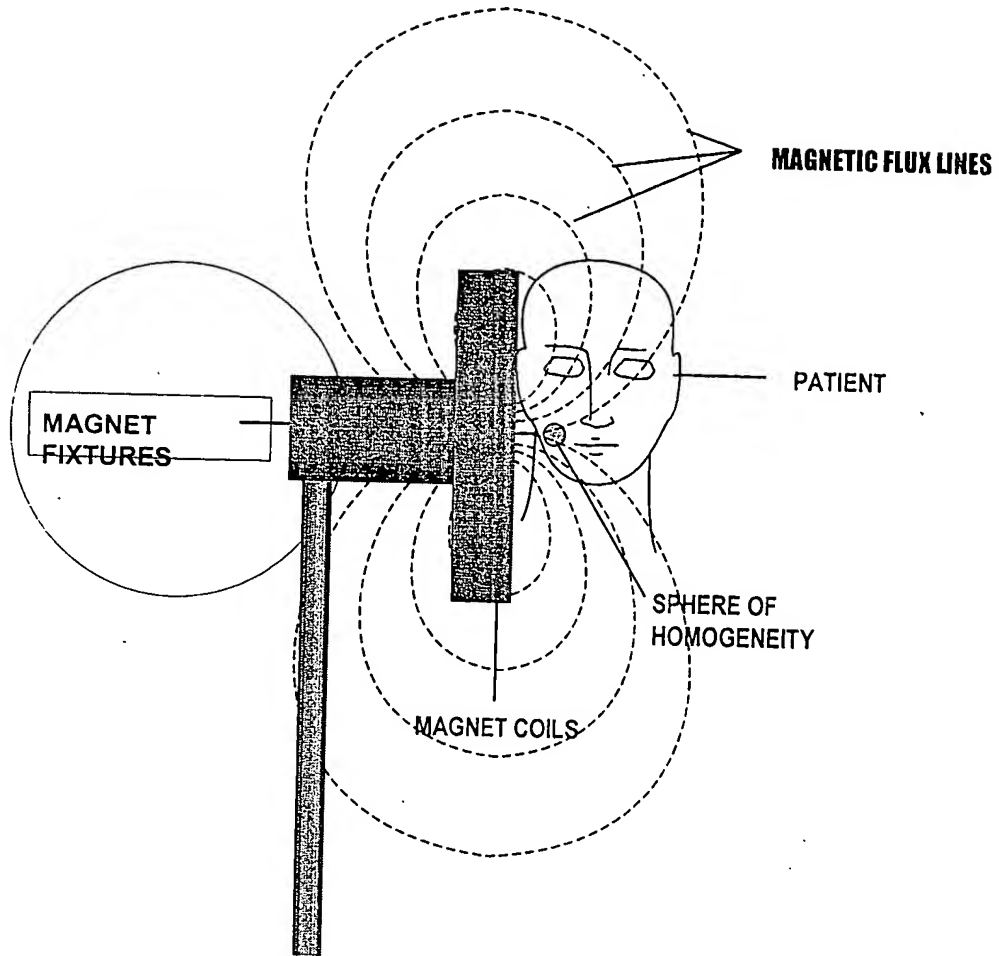


Fig. 2



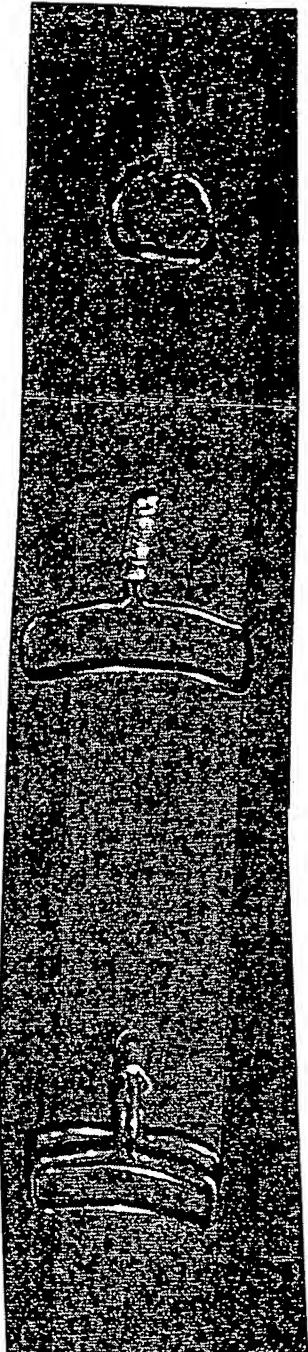


Fig. 3A

Fig. 3B

Fig. 3C

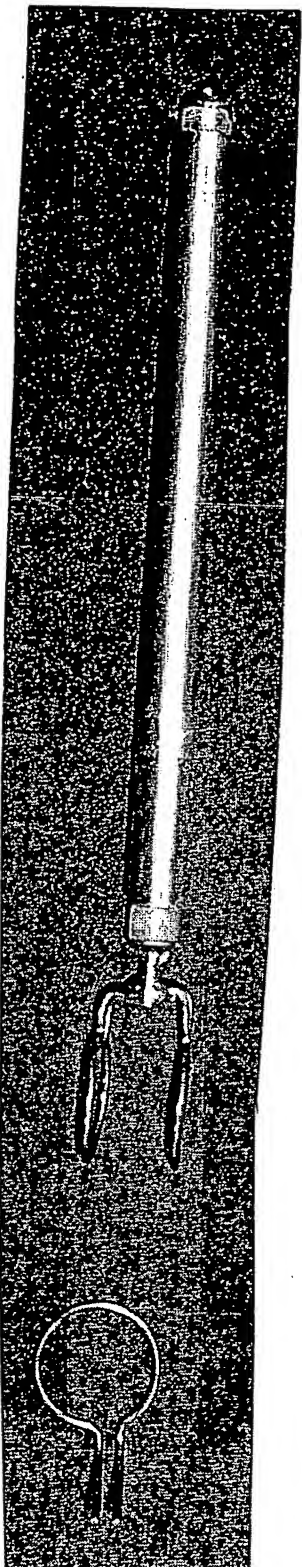


Fig. 3D

Fig. 3E

Fig. 4

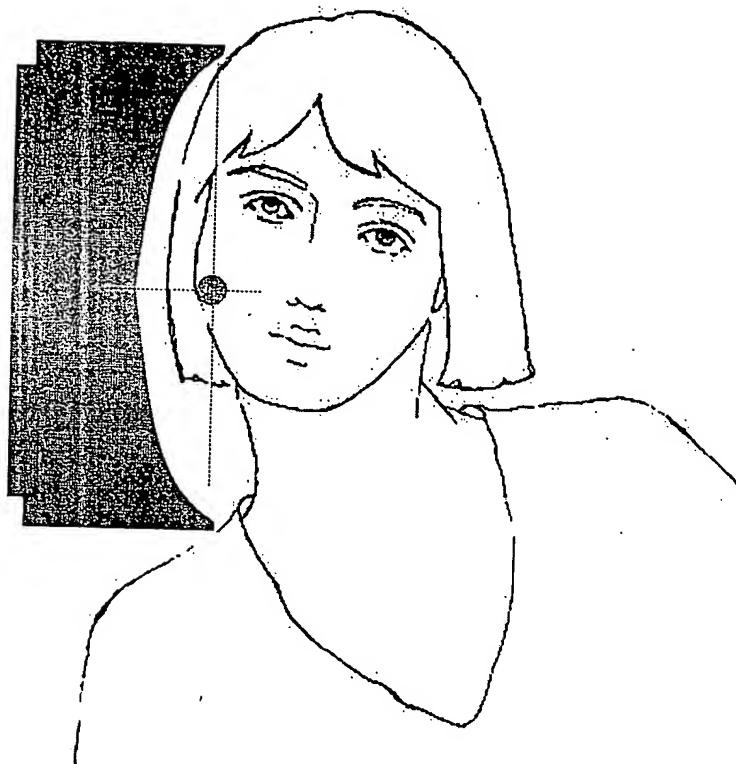


Fig. 5A

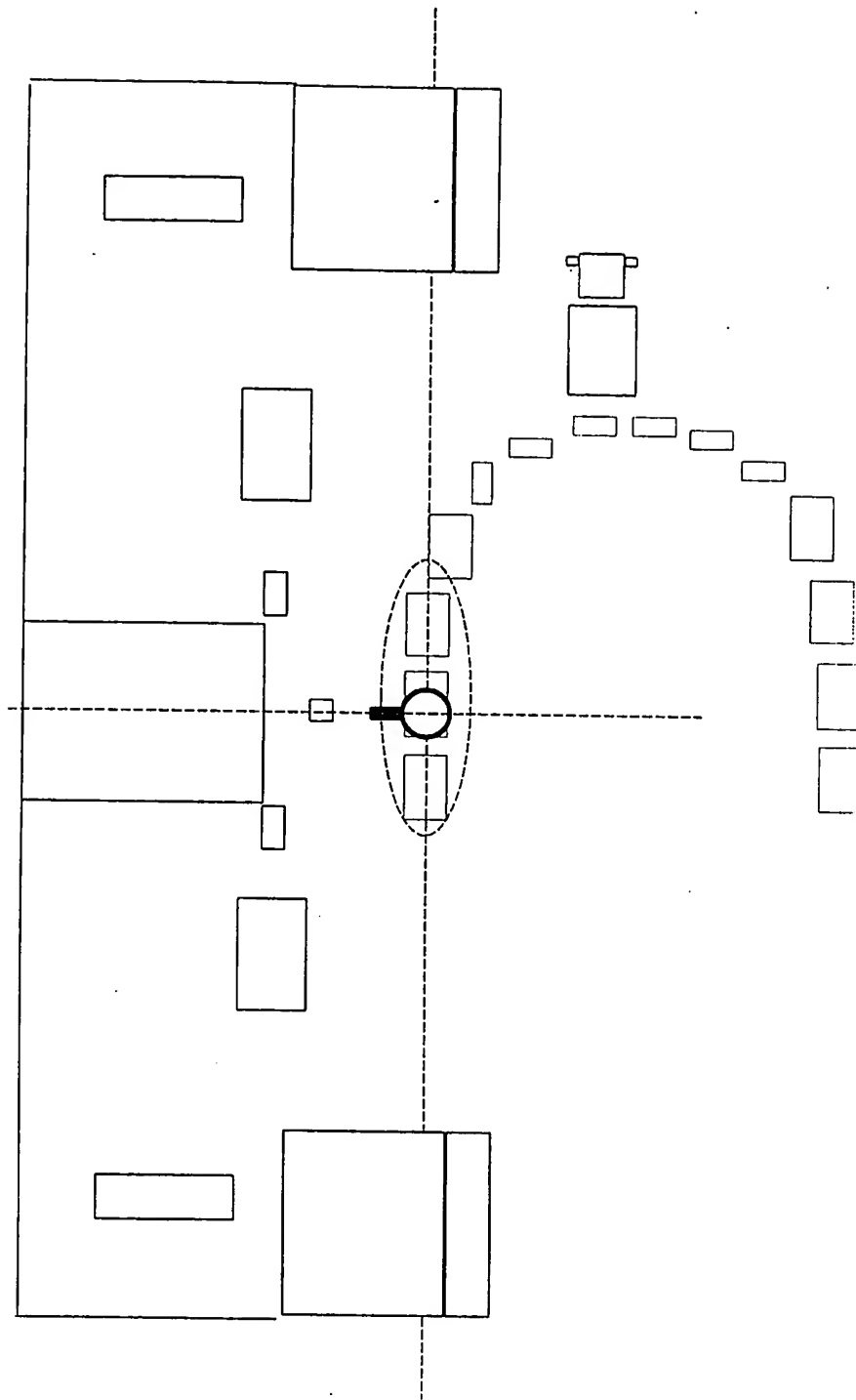
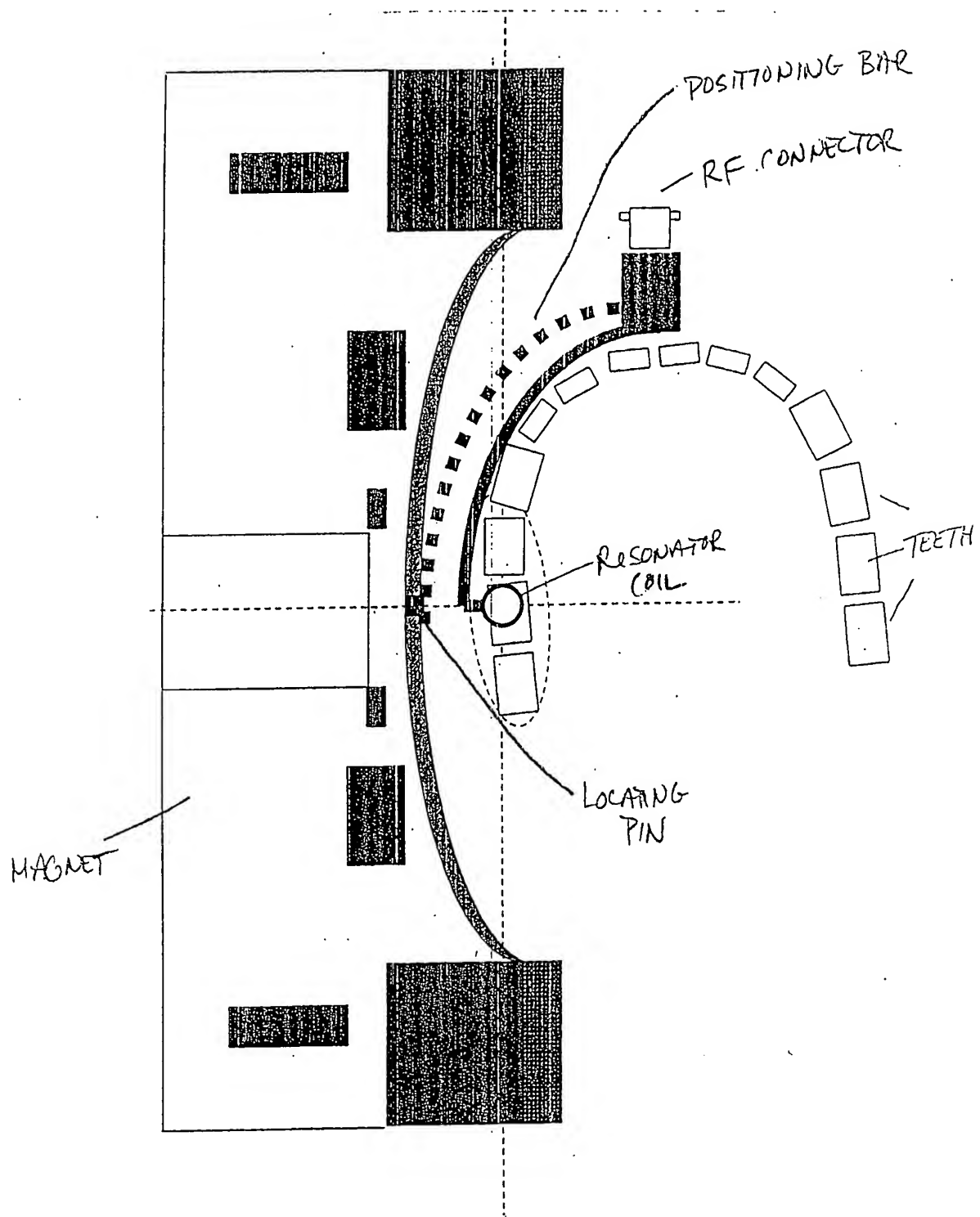


Fig. 5B



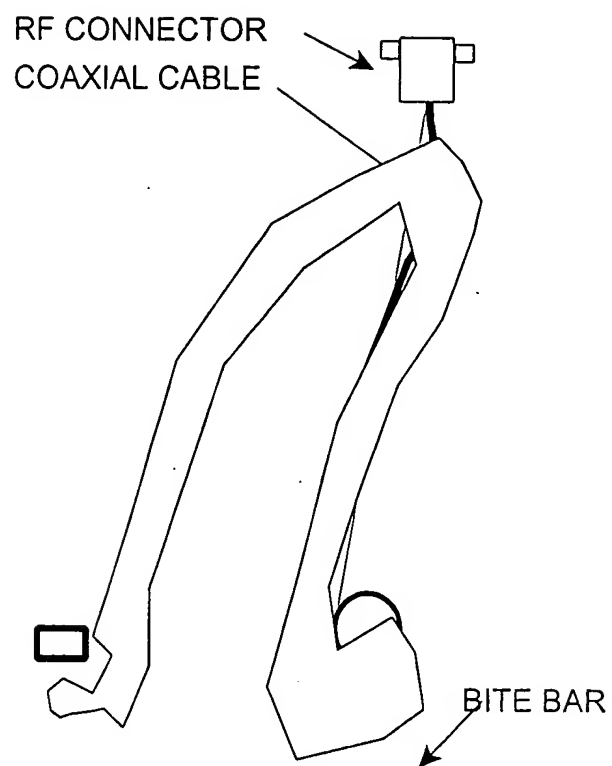


Fig. 6A

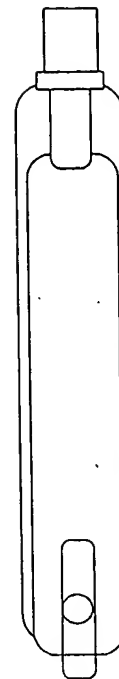


Fig. 6B

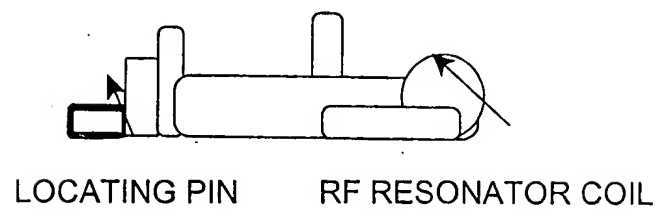


Fig. 6C

Fig. 7A

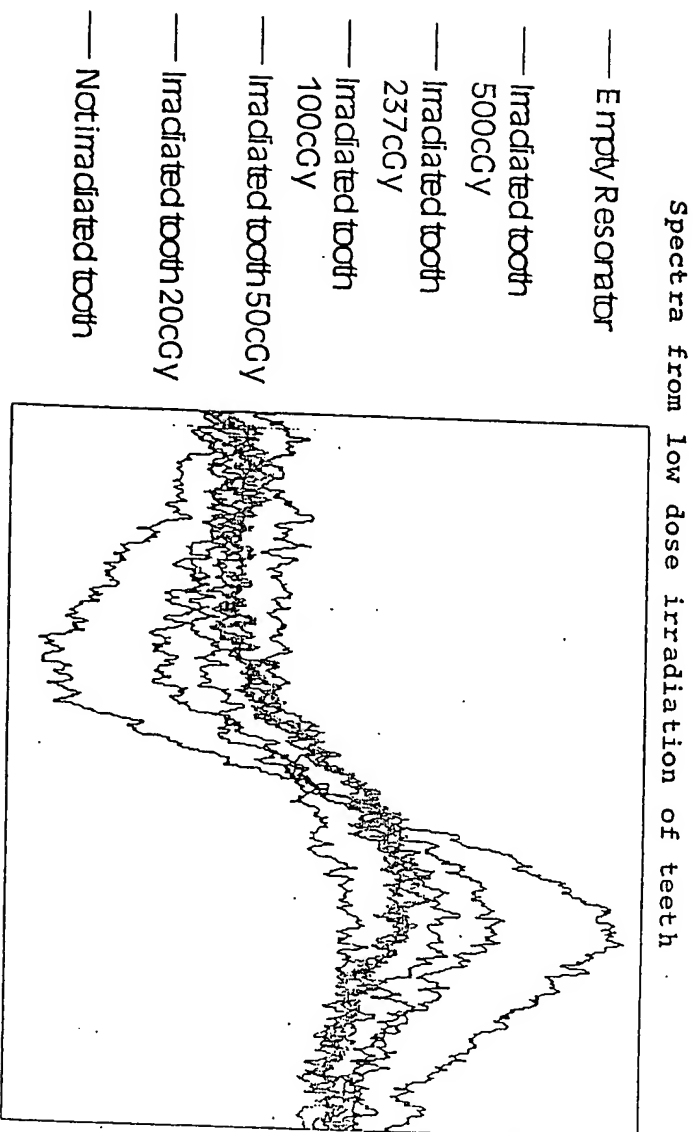
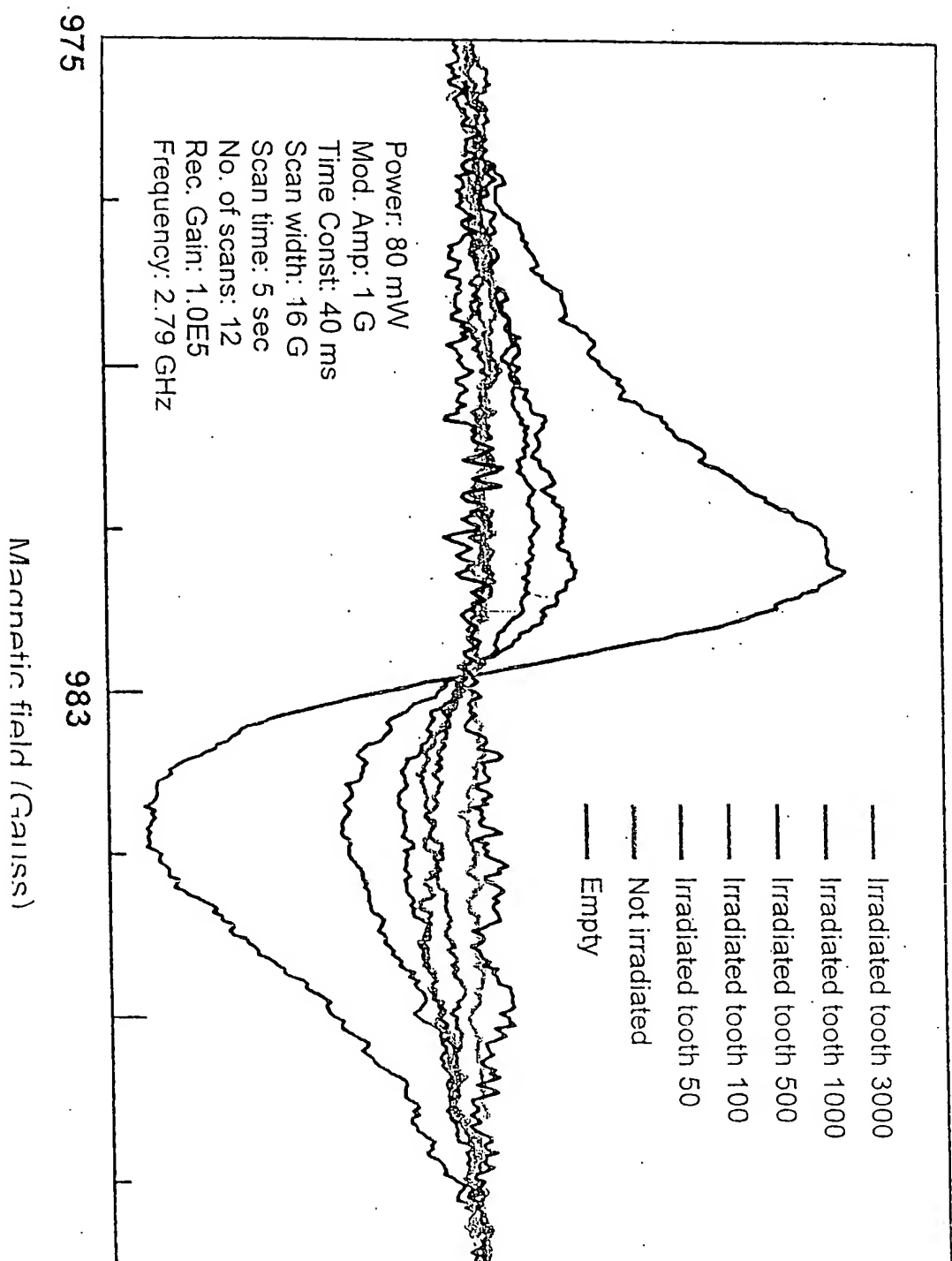


Fig. 7B



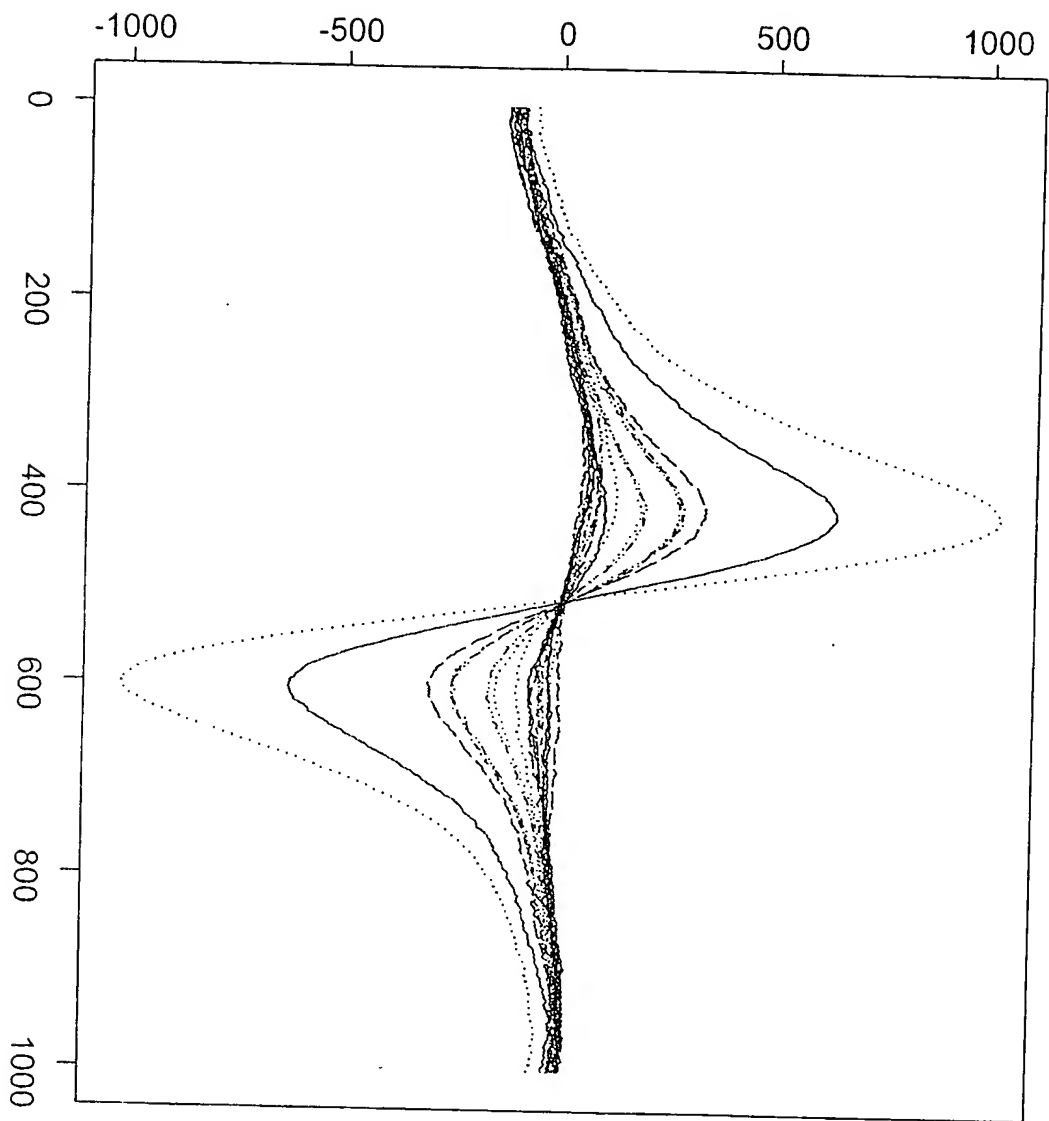


Fig. 8

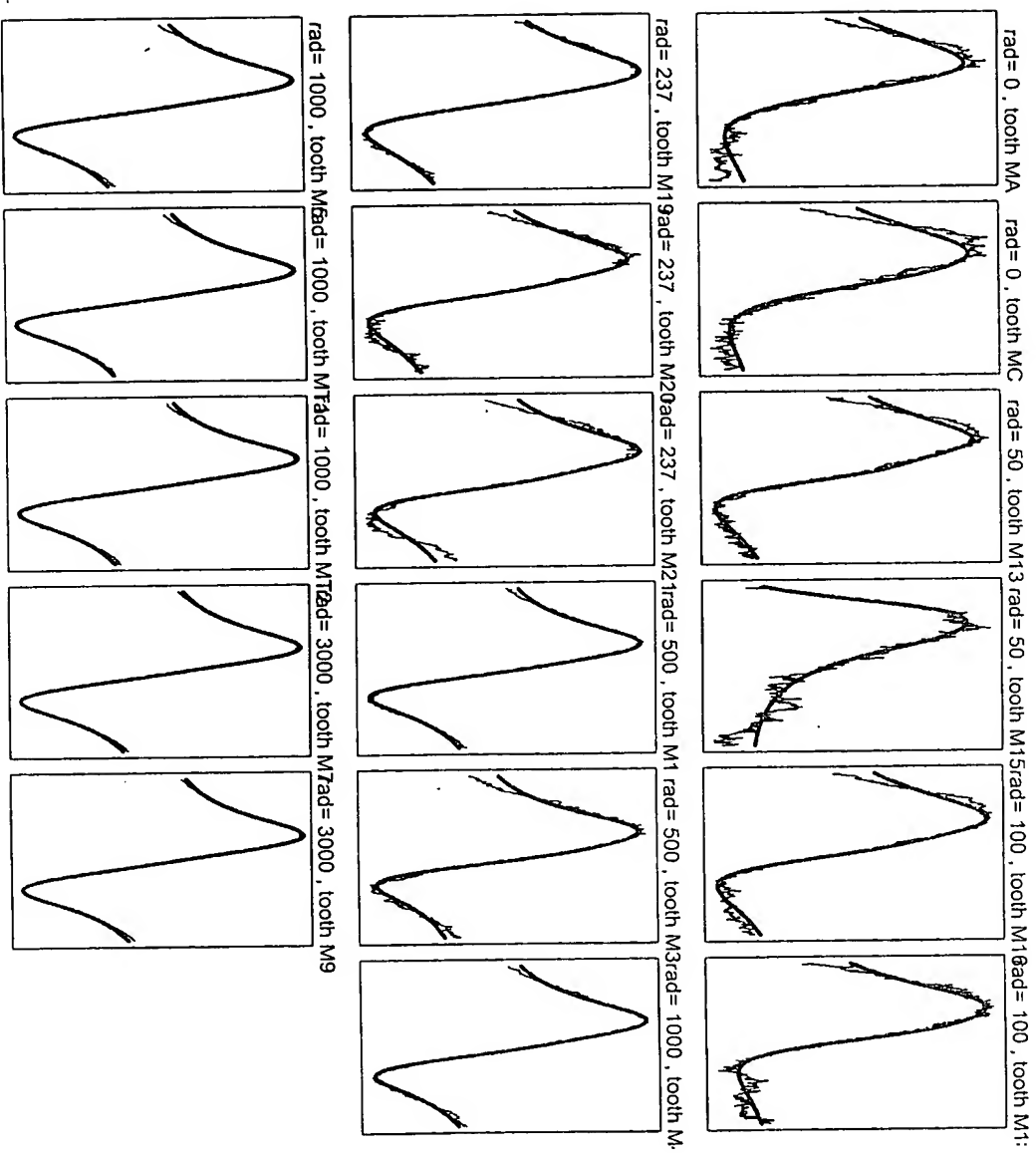


Fig. 9

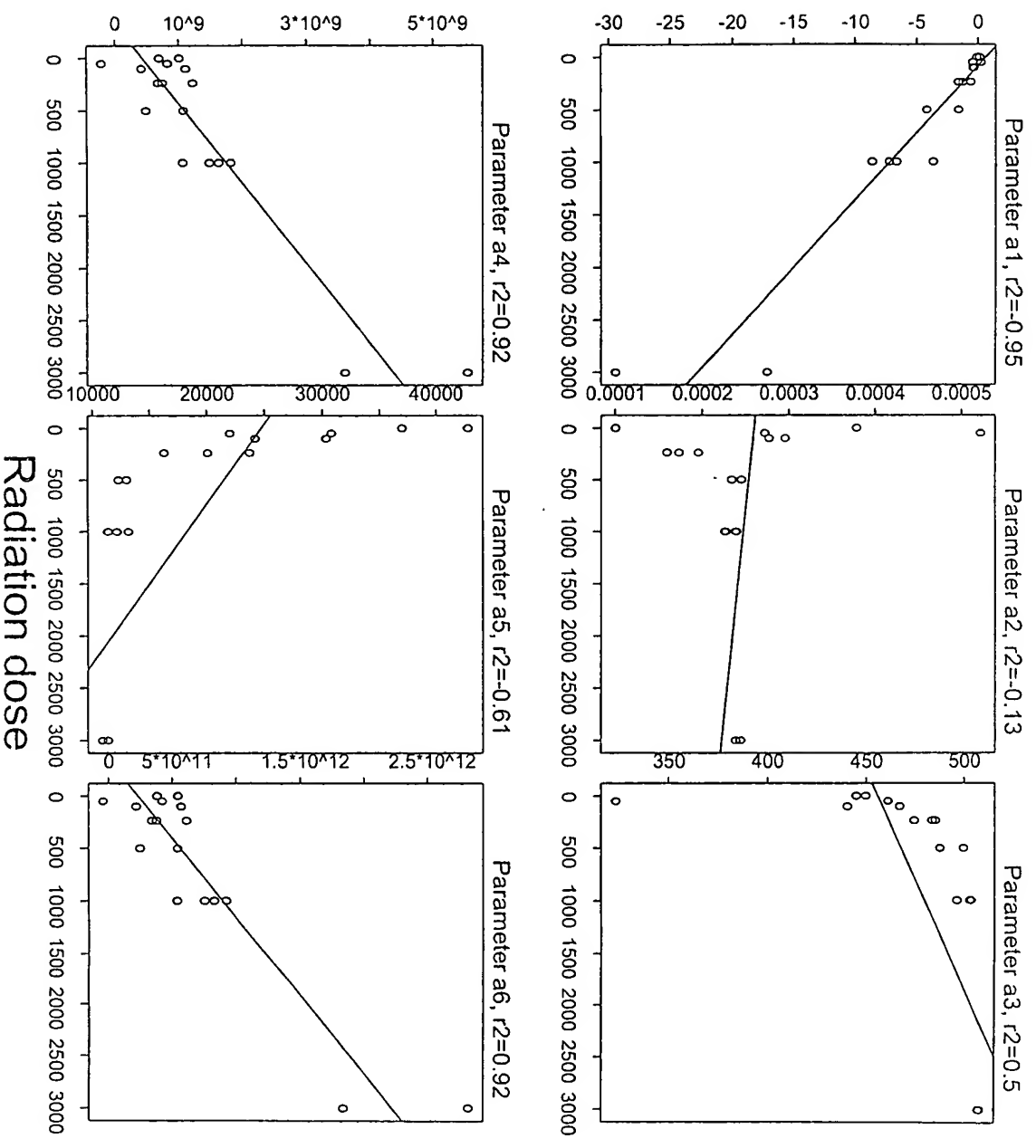


Fig. 10

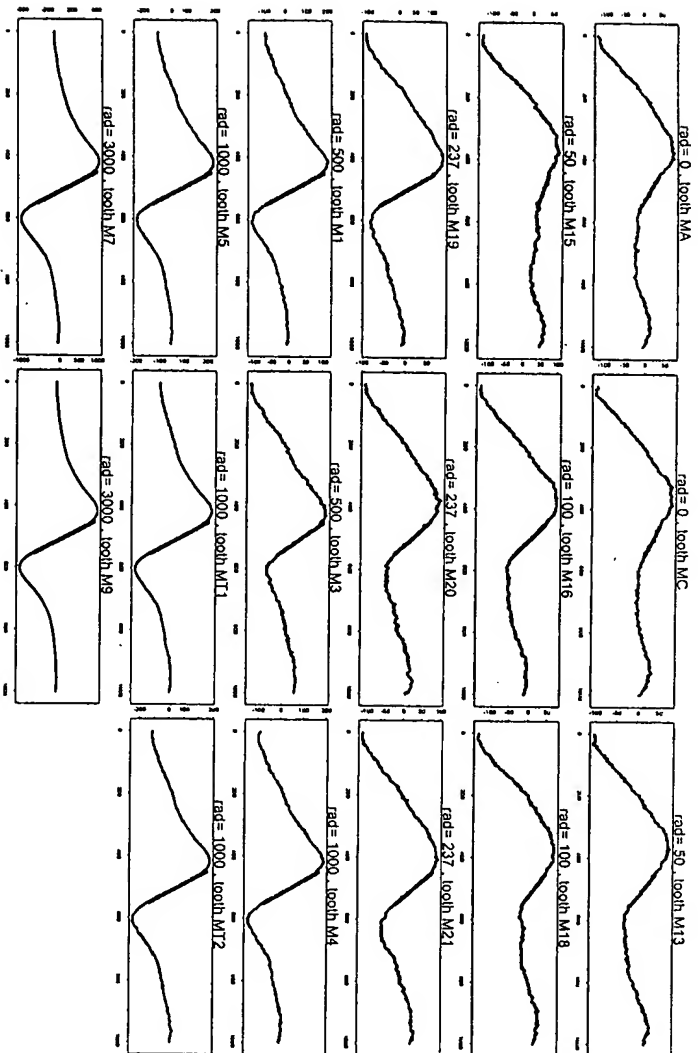


Fig. 11

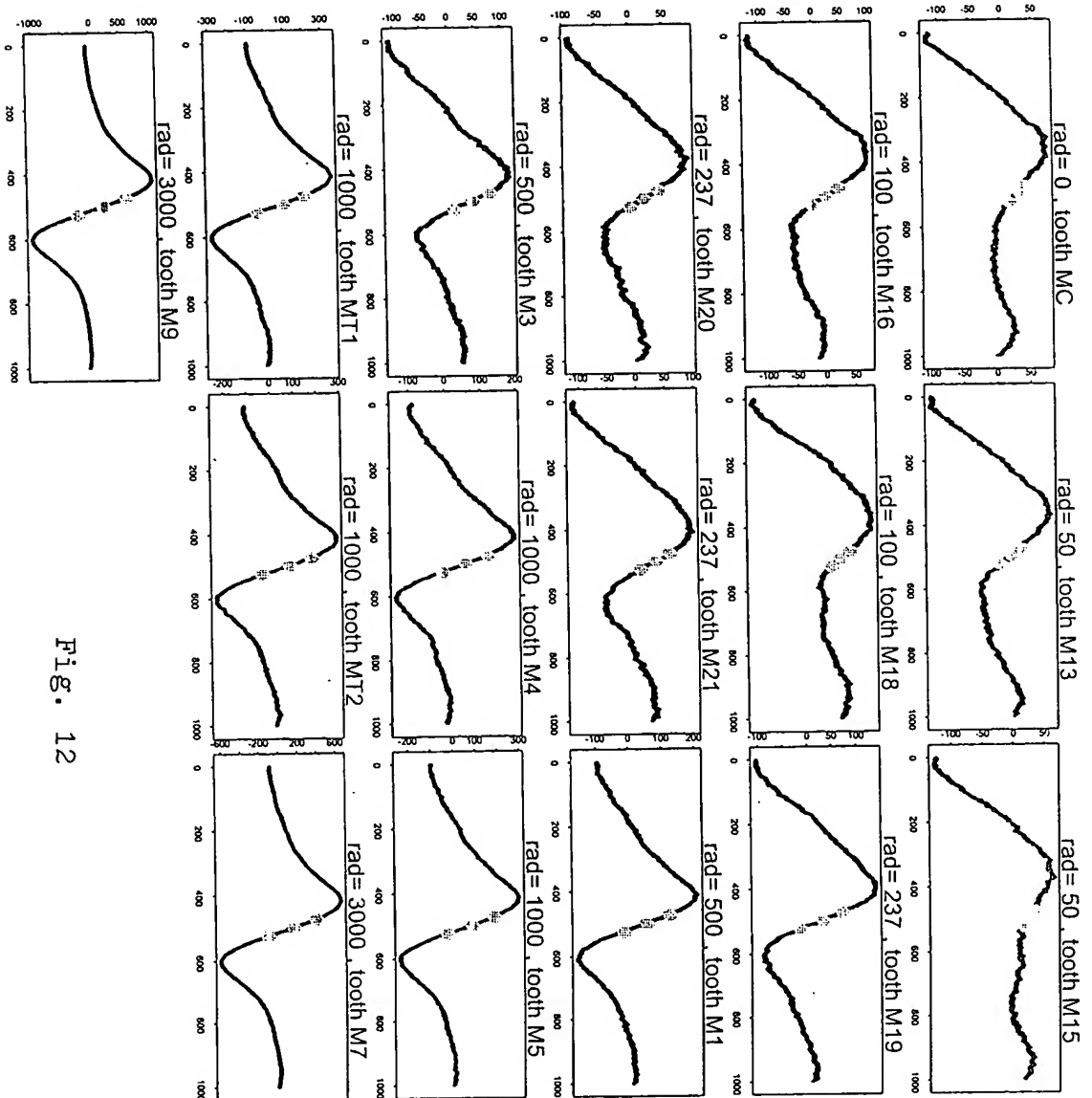


Fig. 12

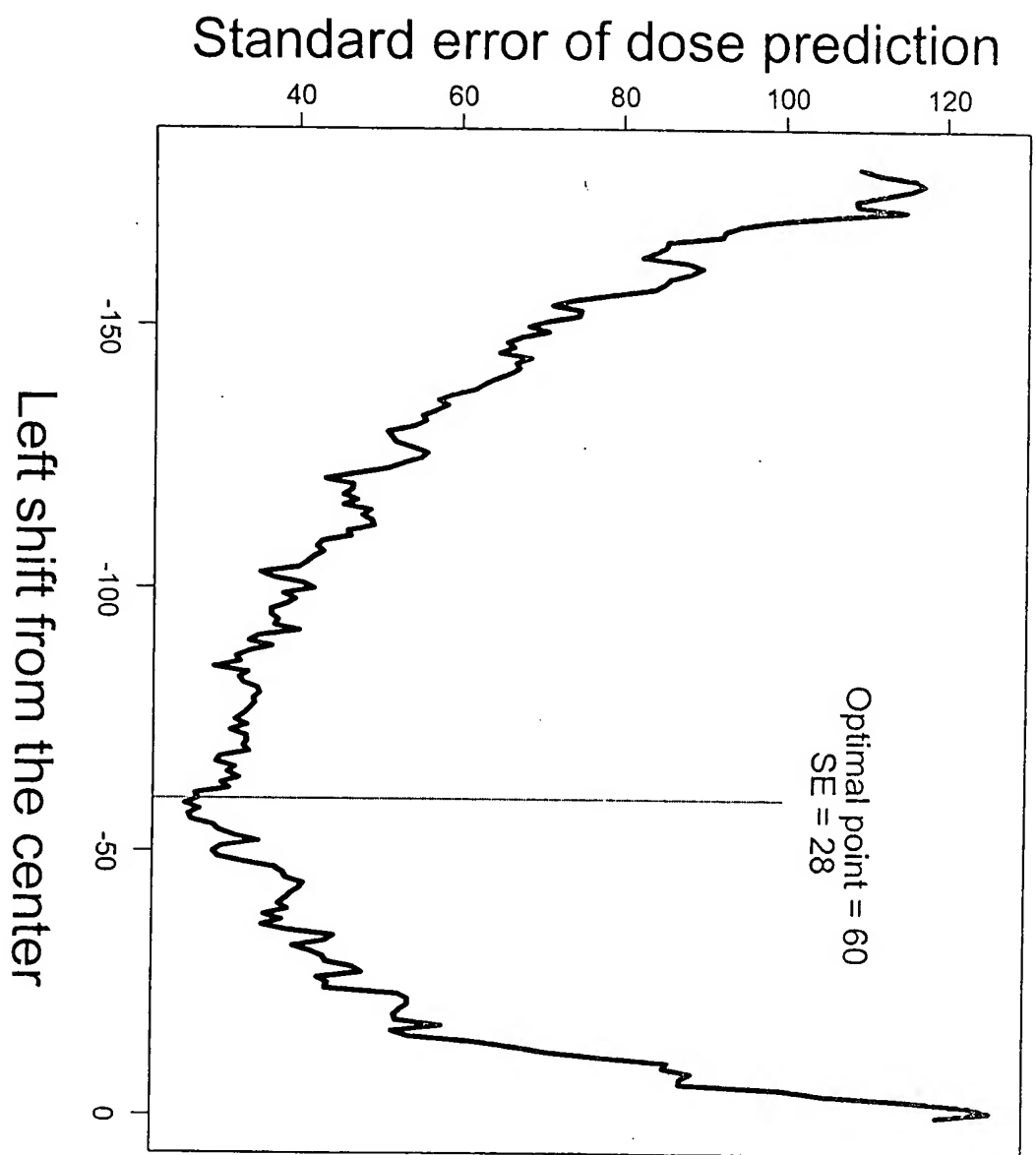


Fig. 13

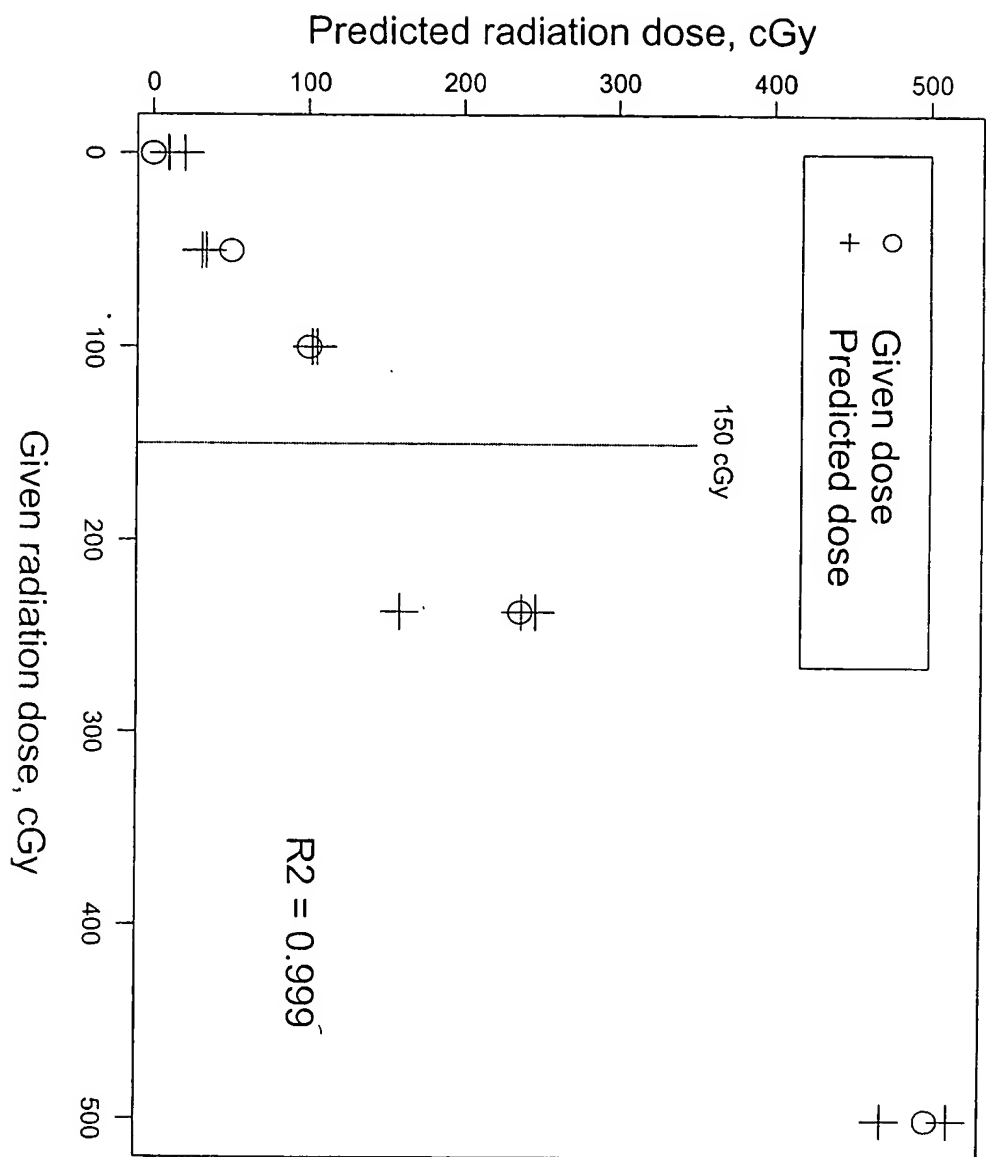


Fig. 14

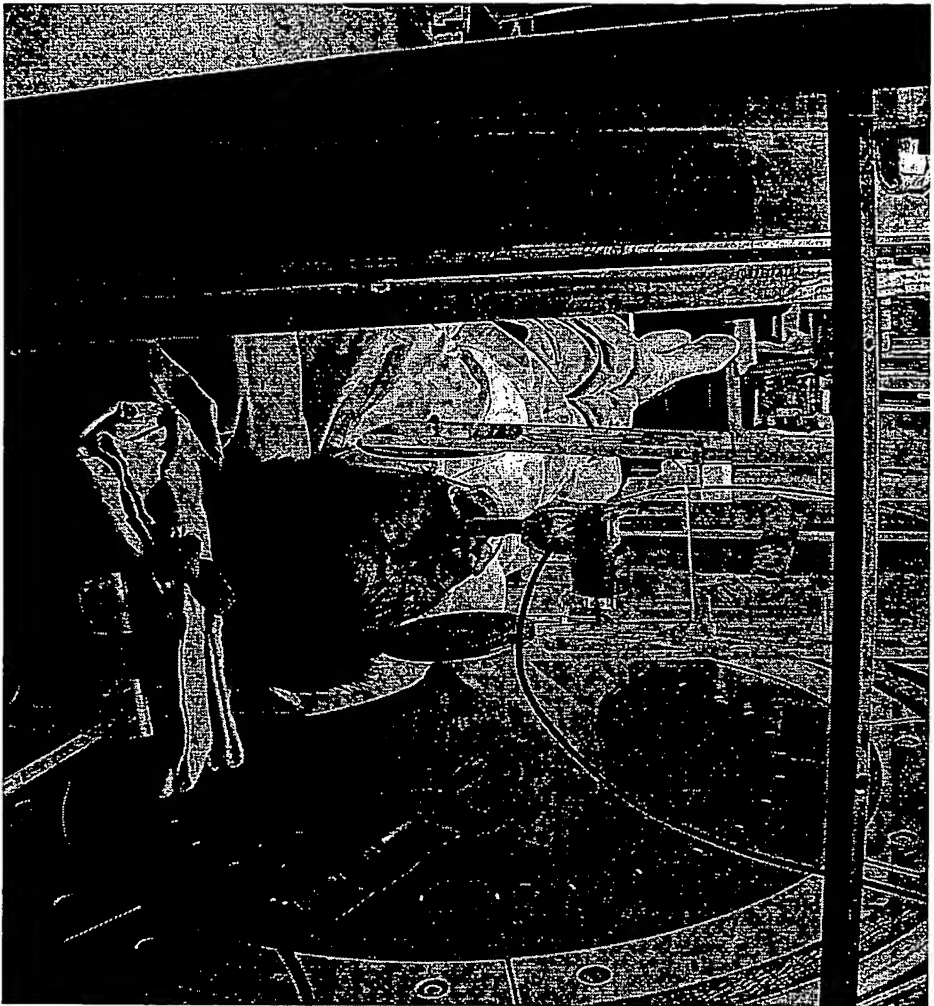


Fig. 15A

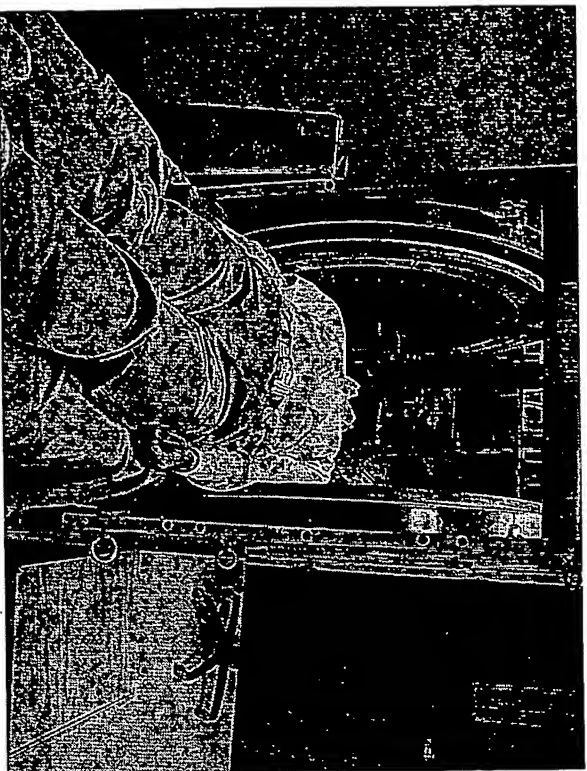


Fig. 15B



Fig. 15C



Fig. 16A

Fig. 16B

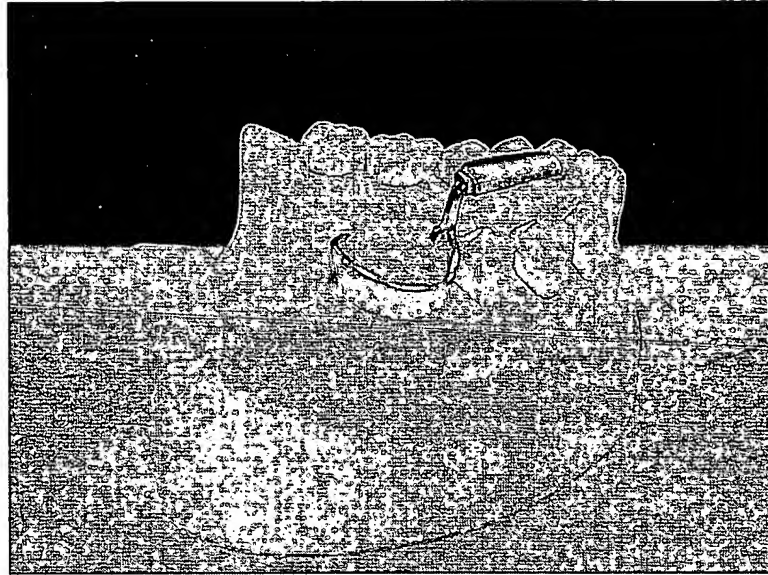
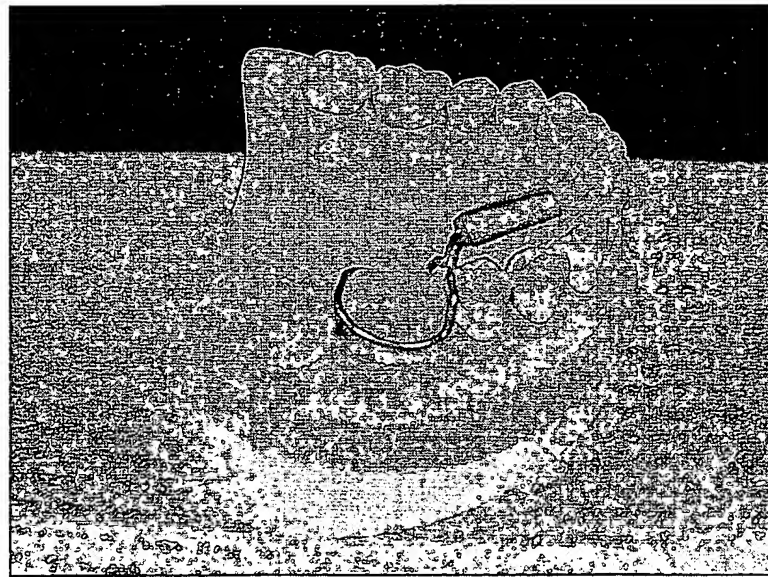


Fig. 16C



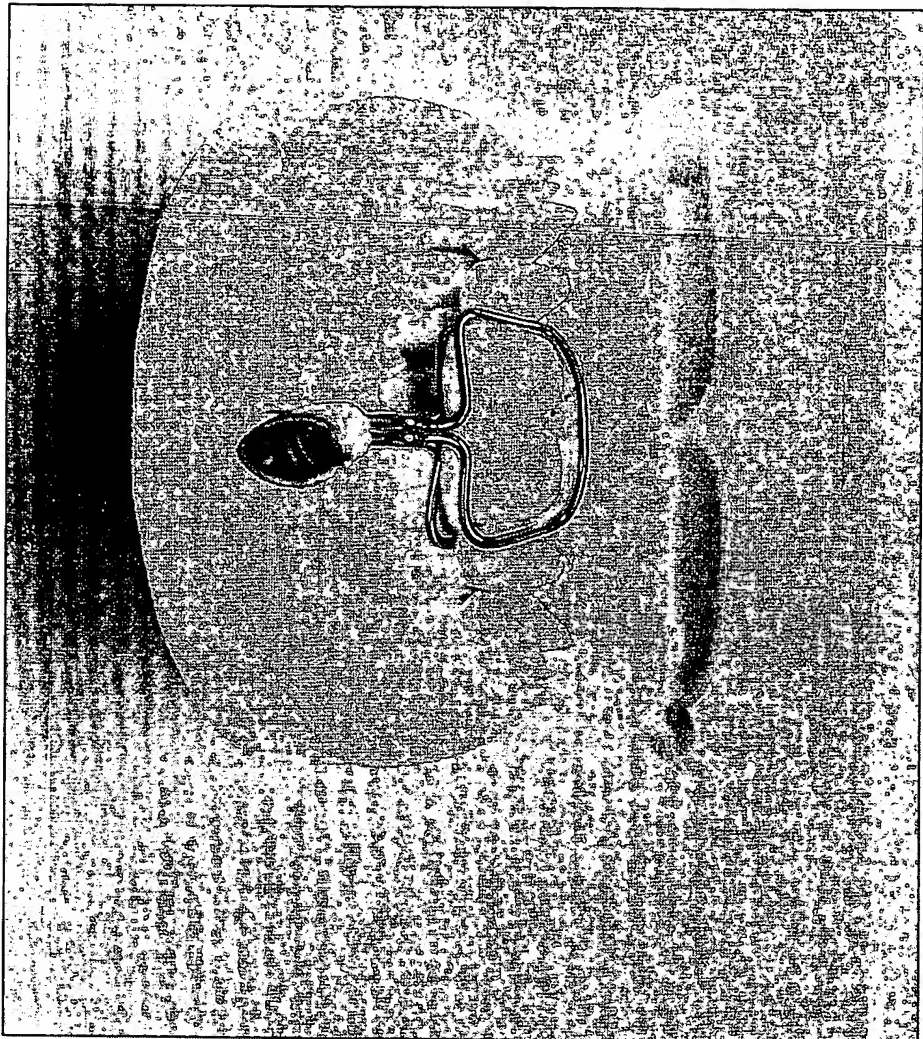


Fig. 17A

Fig. 17B

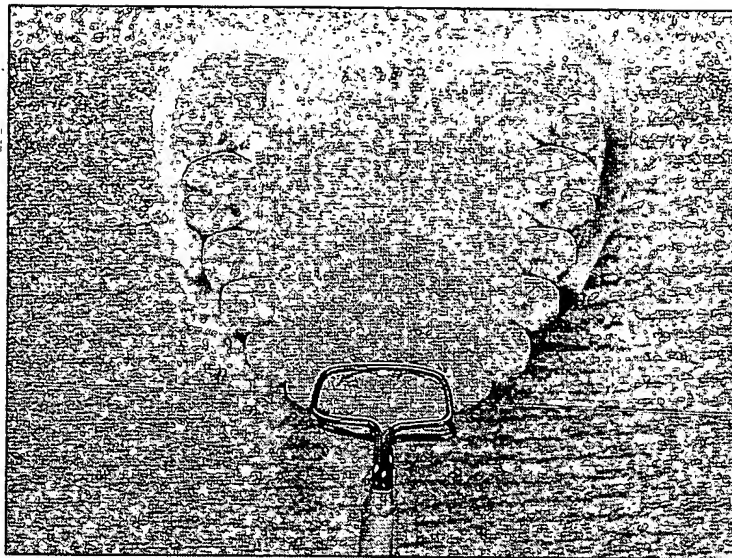
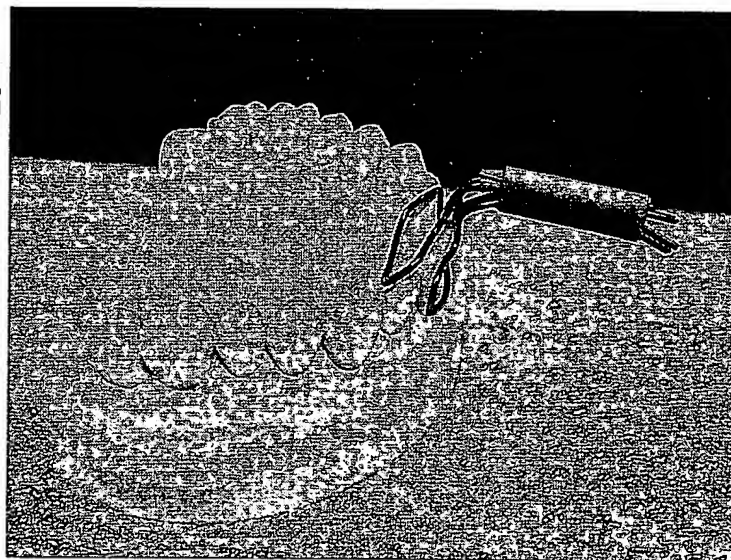


Fig. 17C



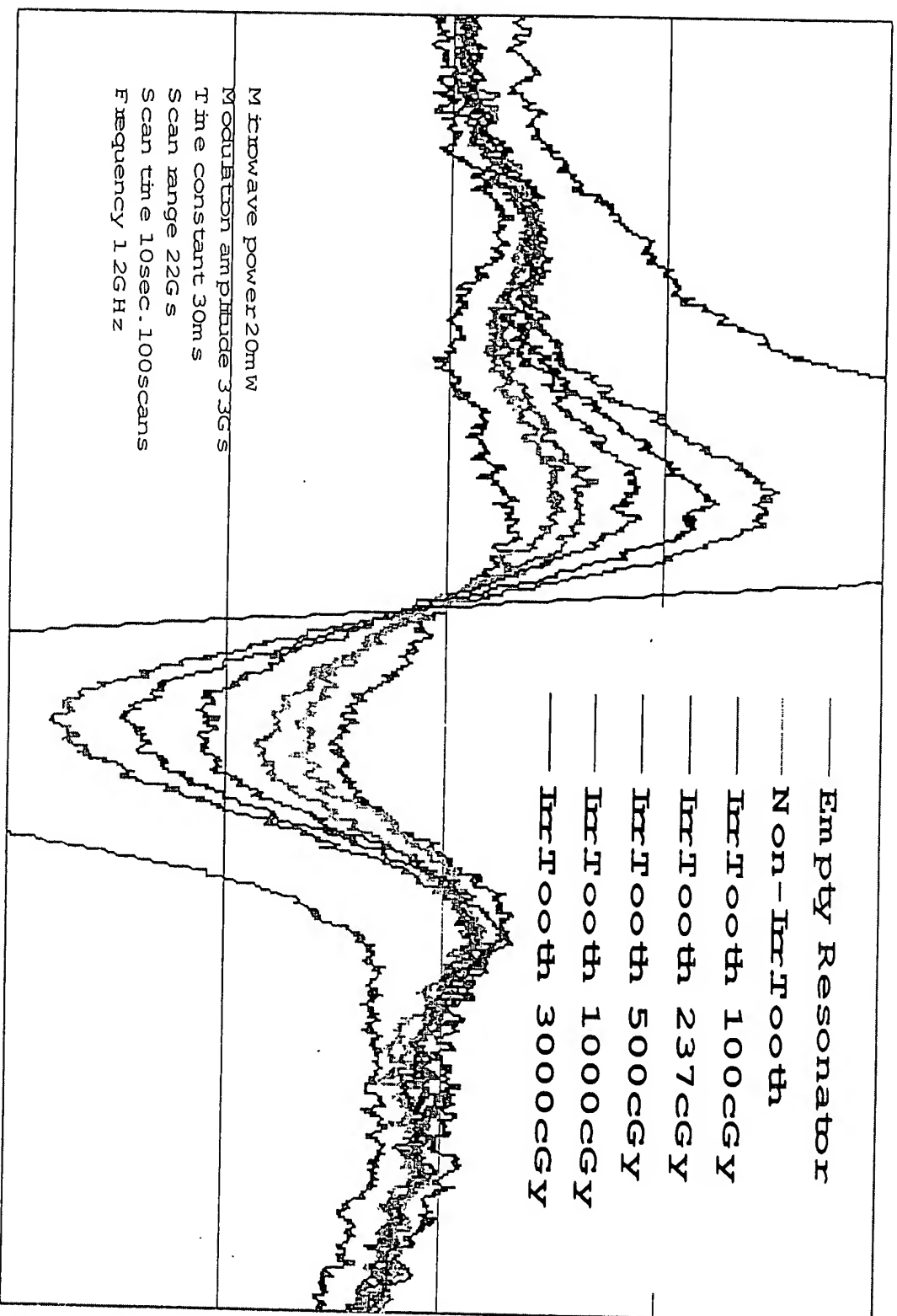


Fig. 18

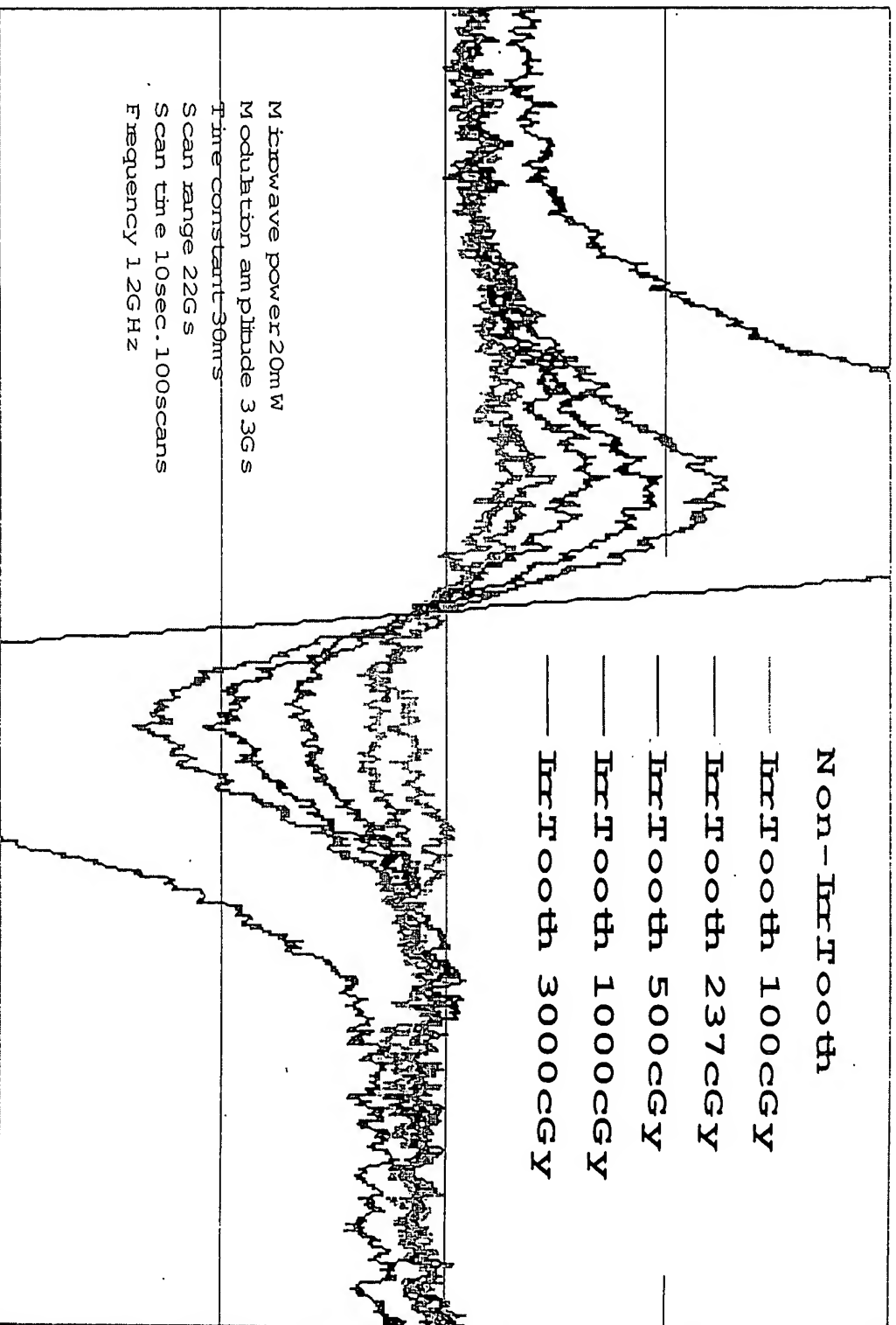


Fig. 19

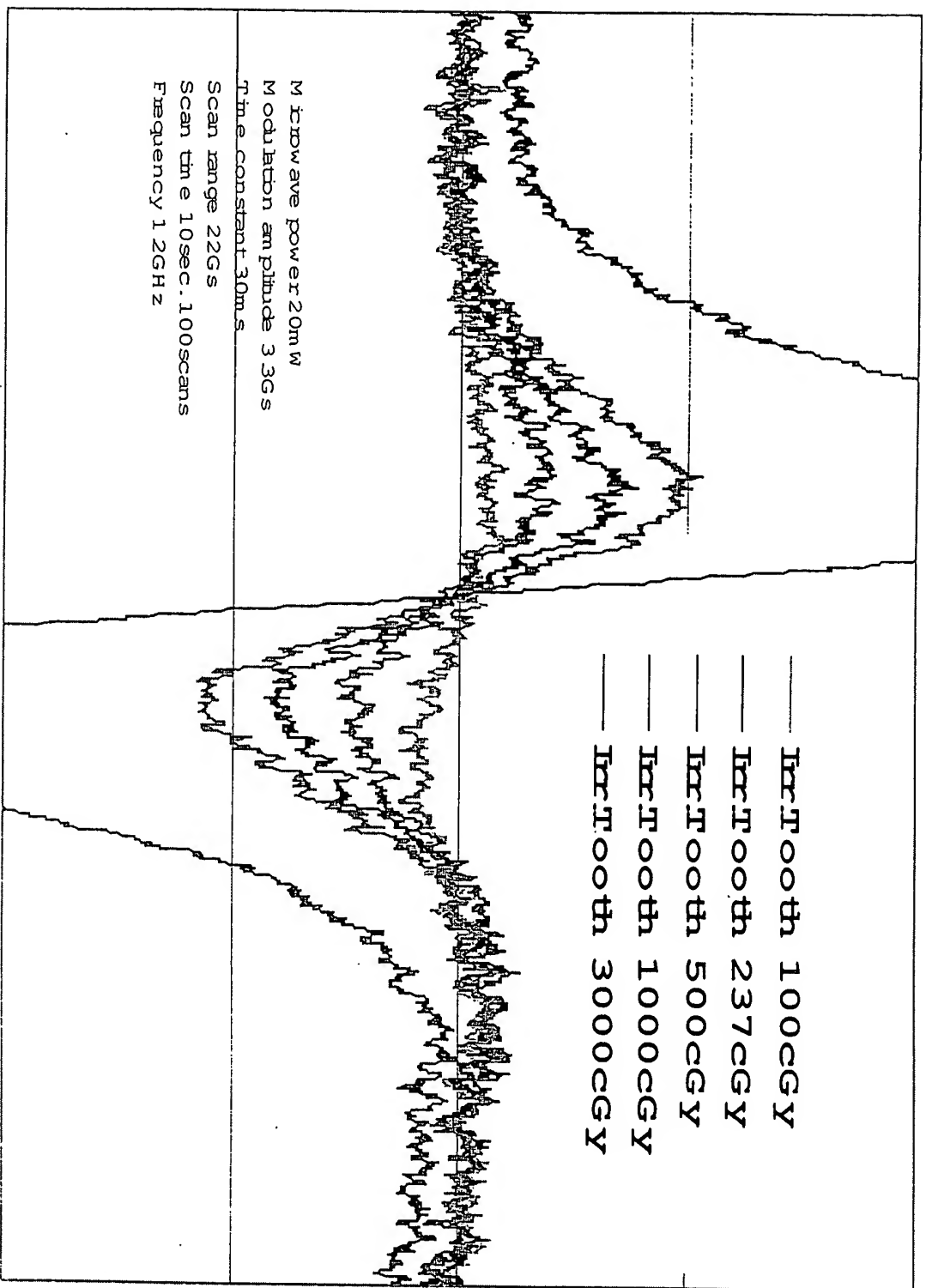


Fig. 20

Fig. 21A

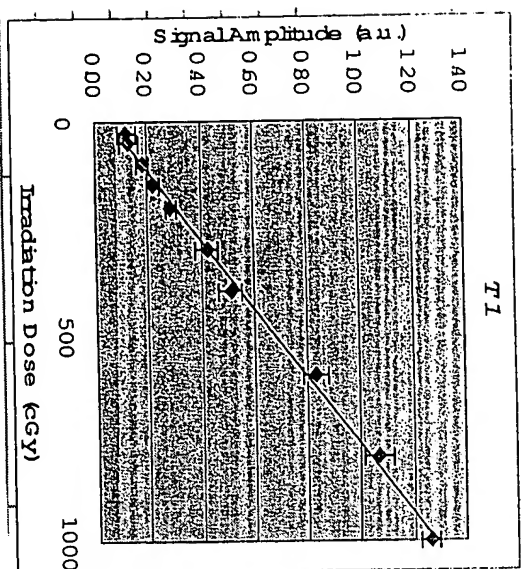


Fig. 21B

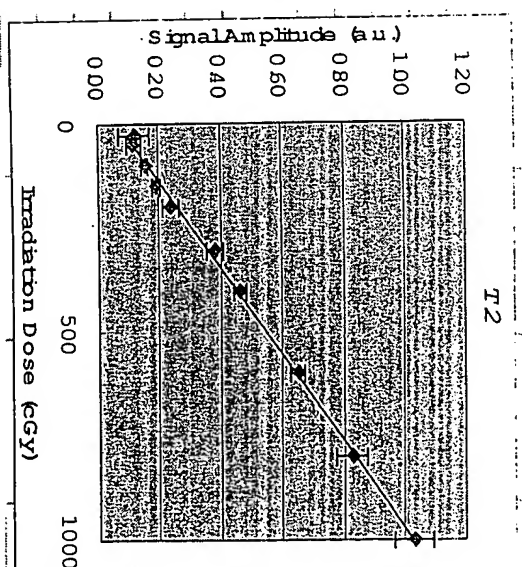


Fig. 21C

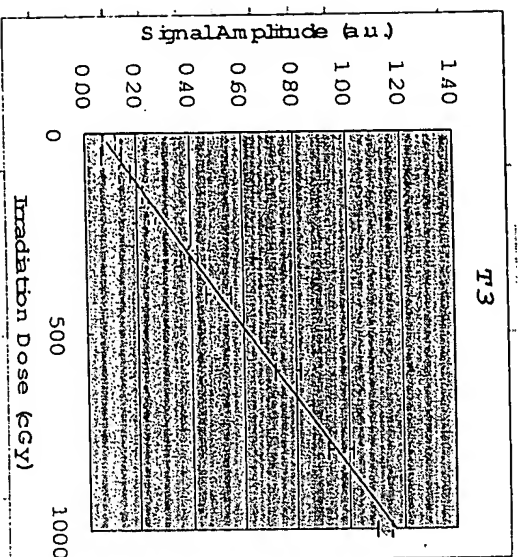
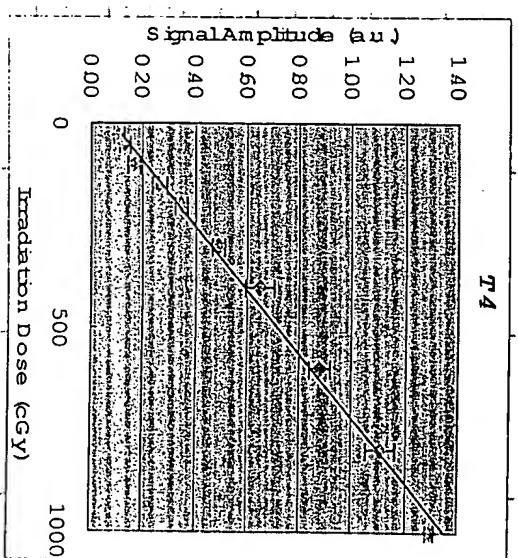


Fig. 21D



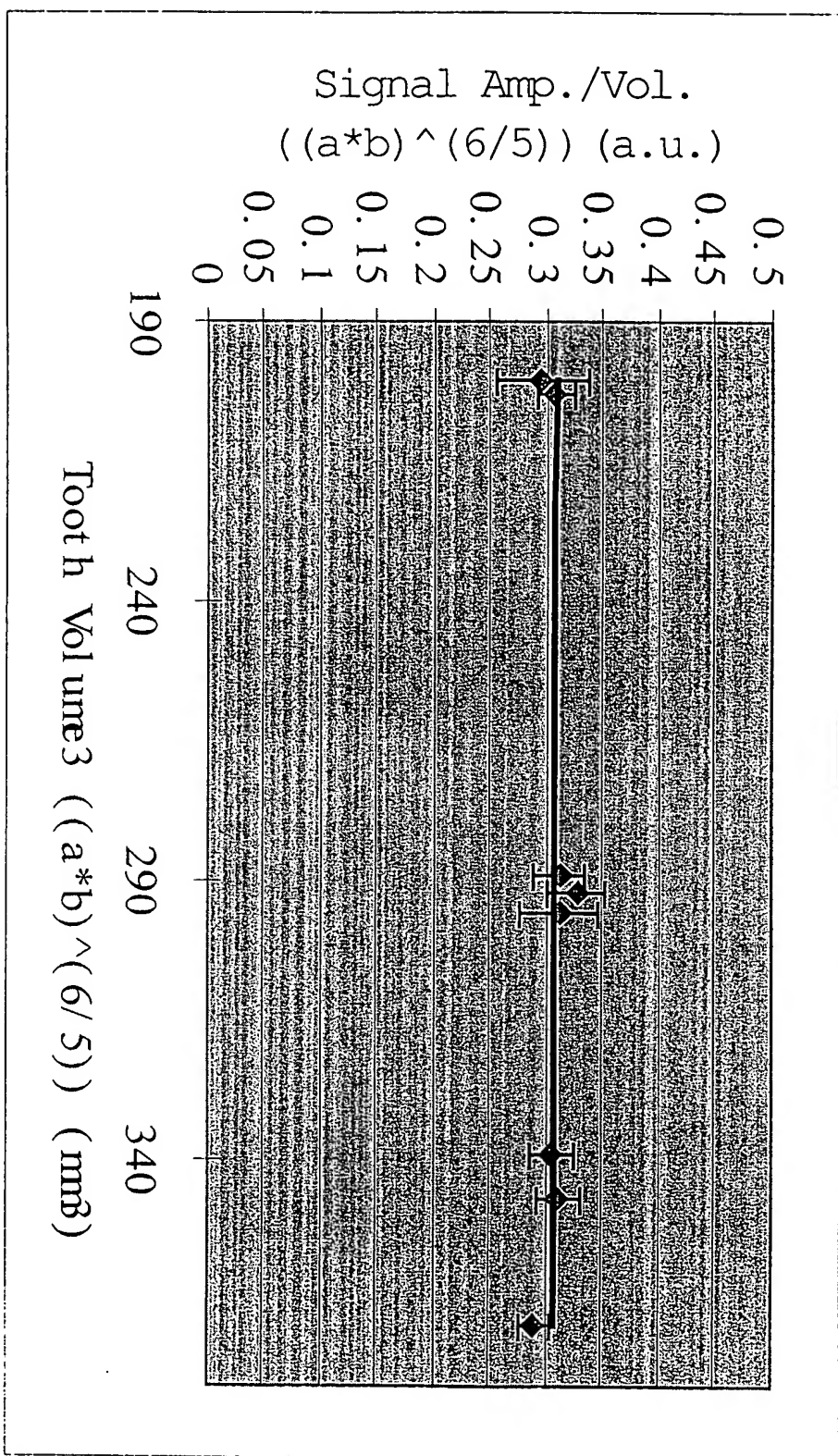


Fig. 22

Fig. 23A

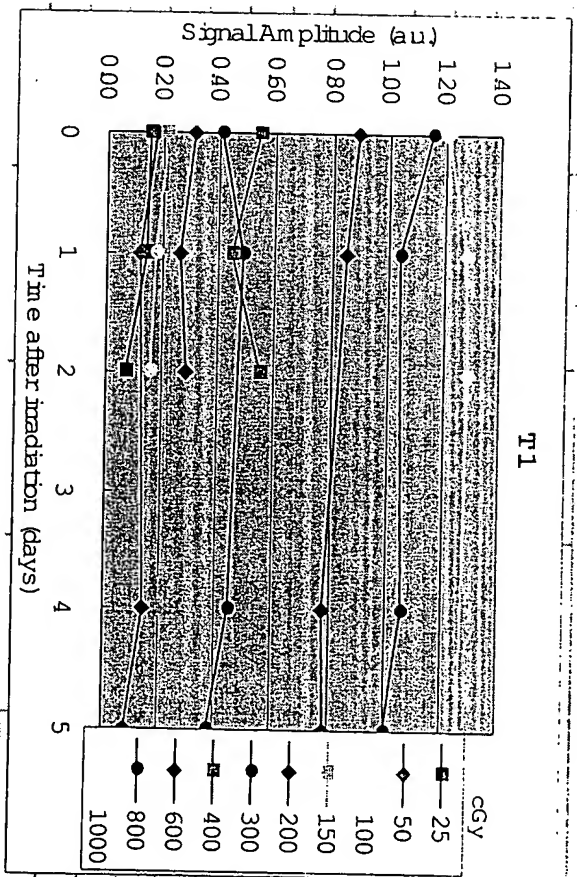


Fig. 23B

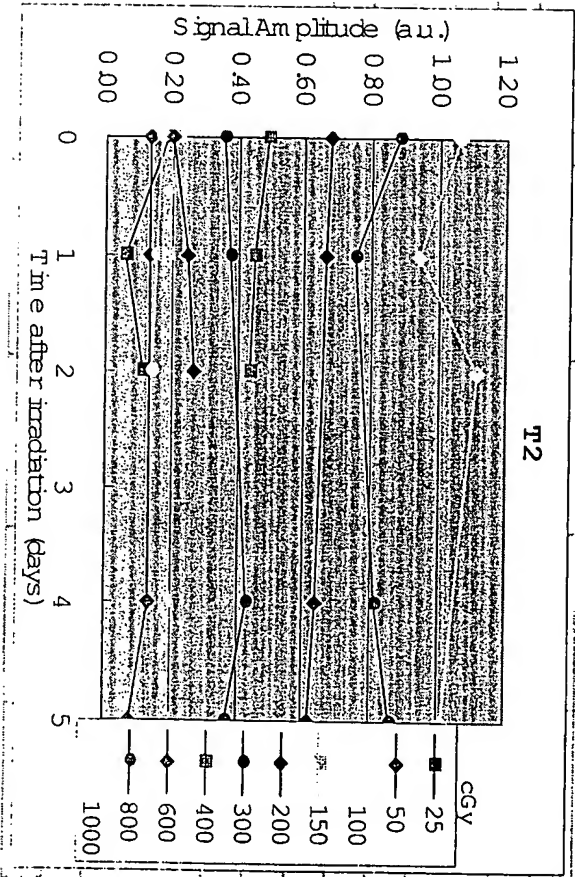


Fig. 23C

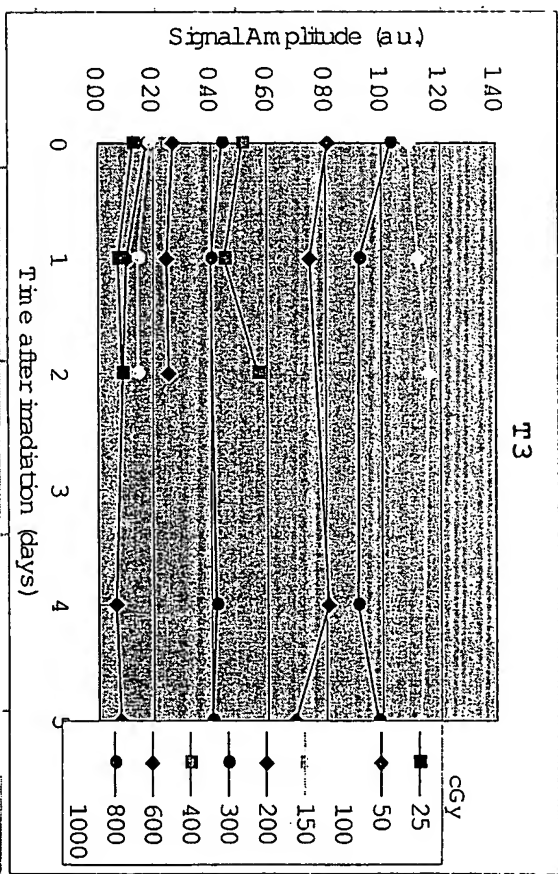


Fig. 23D

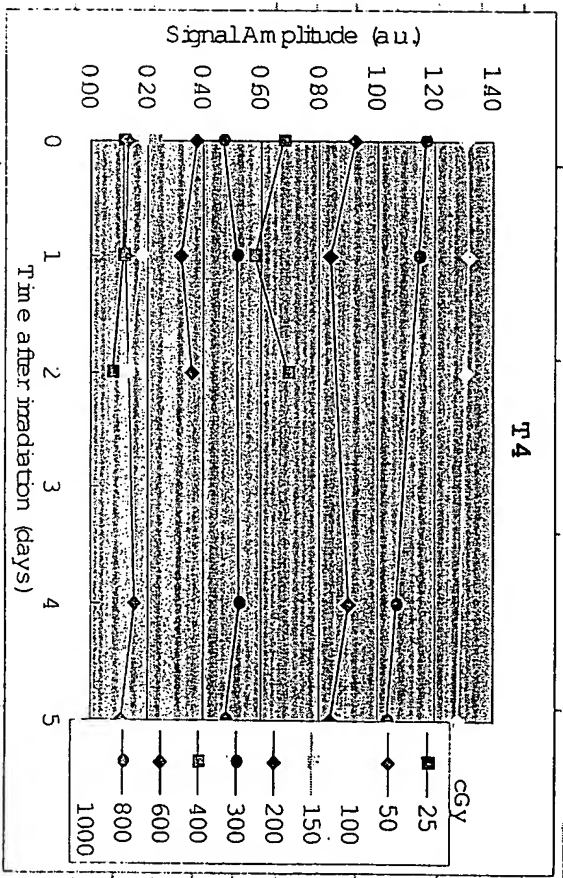


Fig. 24A

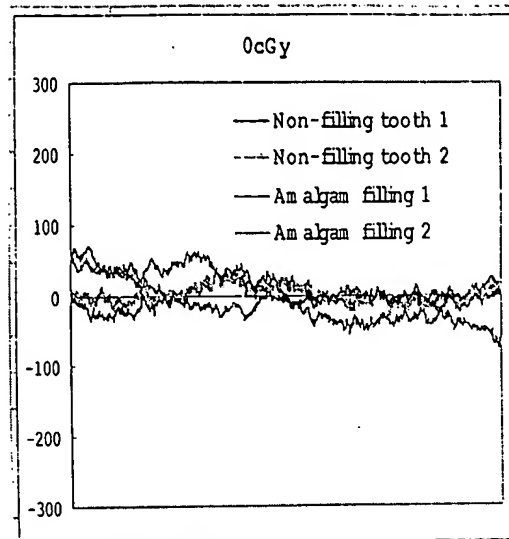


Fig. 24B

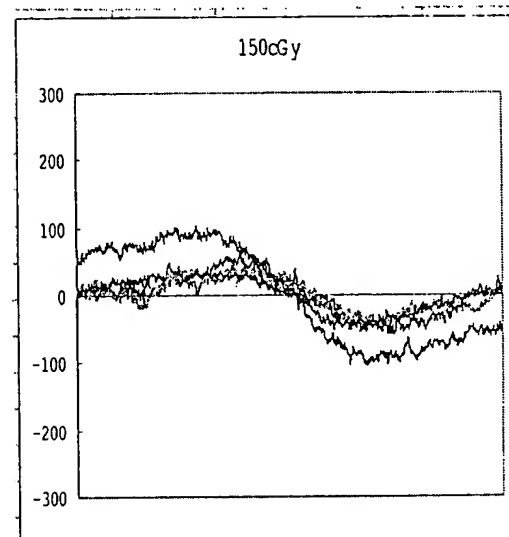


Fig. 24C

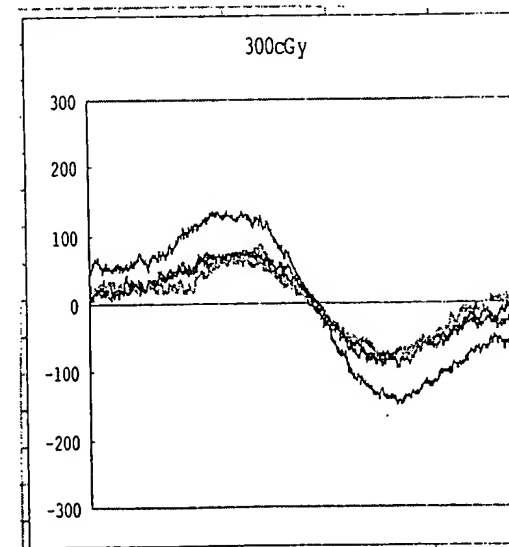


Fig. 24D

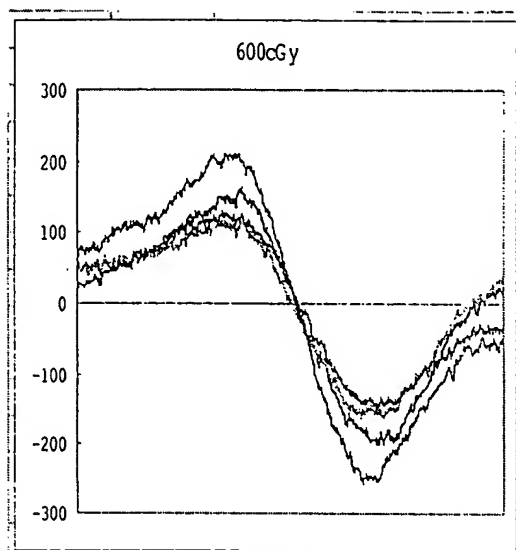
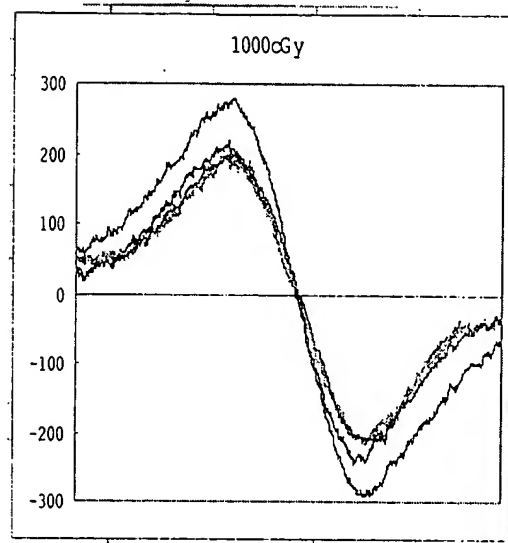


Fig. 24E



Clinical Bridge

Microwave Power 0db,

Modulation Amplitude 3.0GS

Time Constant 30ms

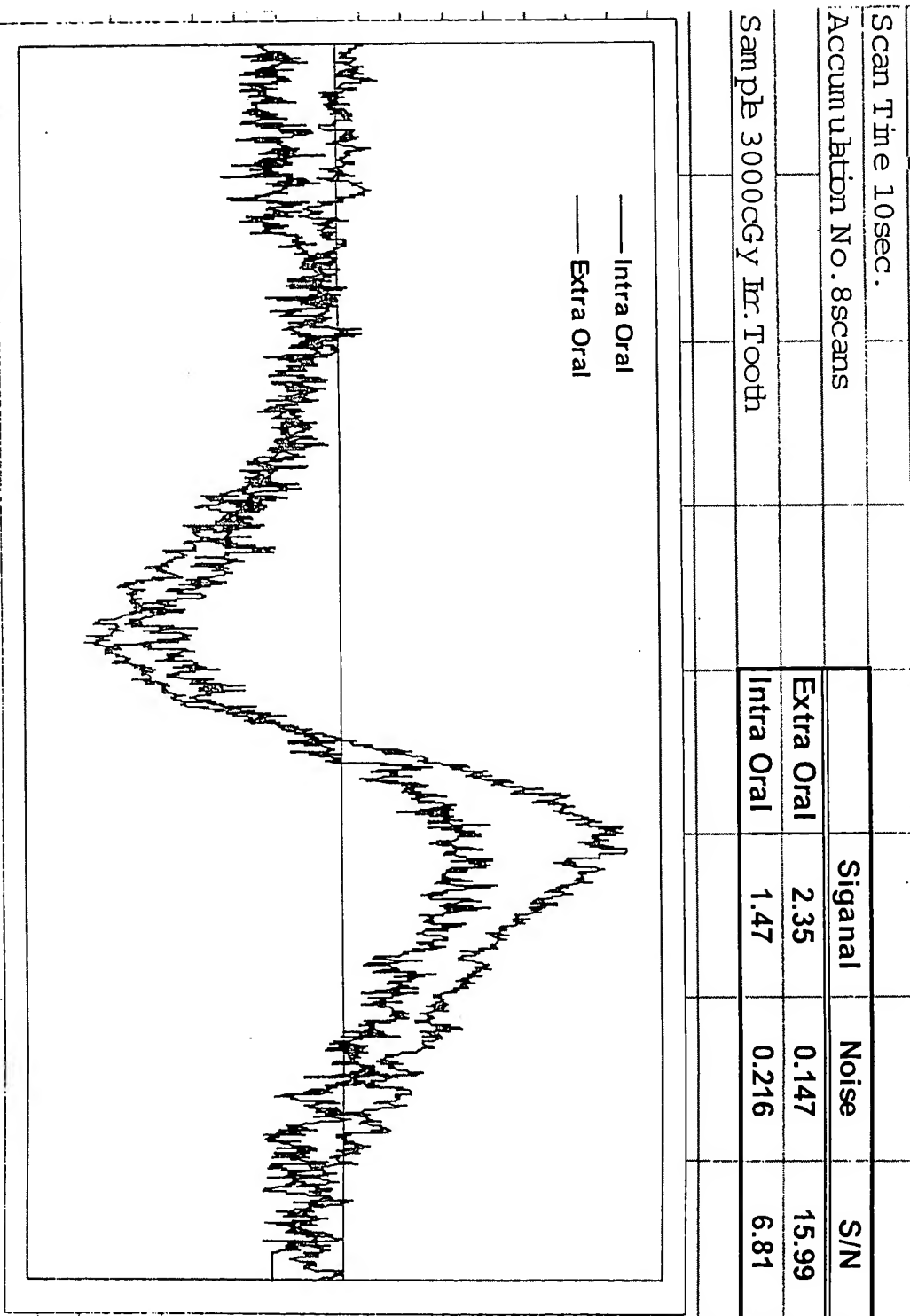
Scan Range 20Gs

Scan Time 10sec.

Accumulation No. 8scans

Sample 3000cGy Ir. Tooth

Fig. 25



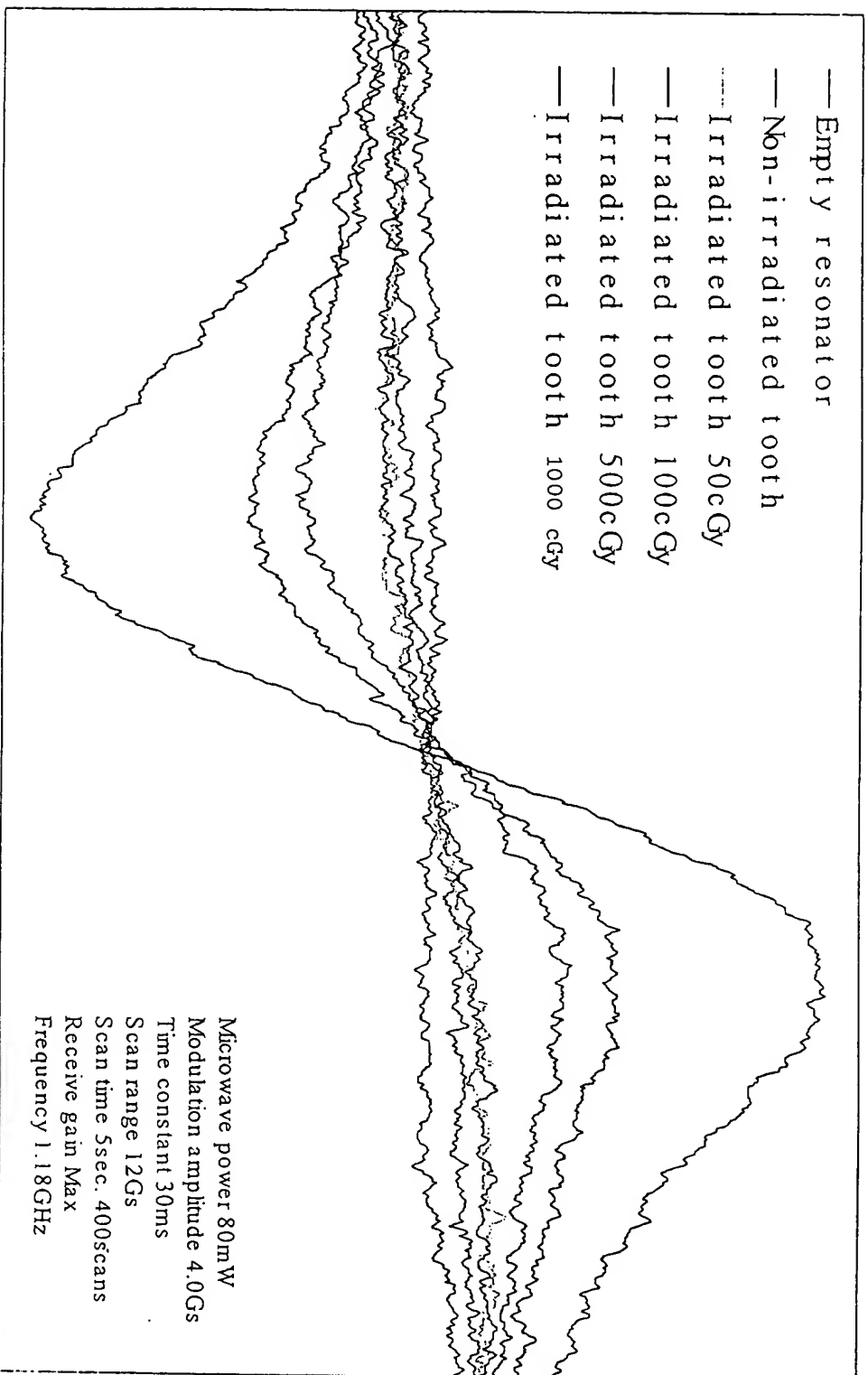


Fig. 26

	BW 1	BW 2	Q-factor1	Q-factor2	Q-factor Ave.	SD
OutoralEmpty Resonator	1.95	2.1	600.00	557.1	578.57	21.43
IntraoralLeft Side (Molar region)	4.6	5.7	254.35	205.3	229.81	24.54
IntraoralRight Side (Molar region)	5.1	8.9	229.41	131.5	180.44	48.98
IntraoralCenter	3.4	3.9	344.12	300.0	322.06	22.06
IntraoralCenter (Tongue pressed to the bop)	13.7	14.1	85.40	83.0	84.19	1.21

Fig. 27A

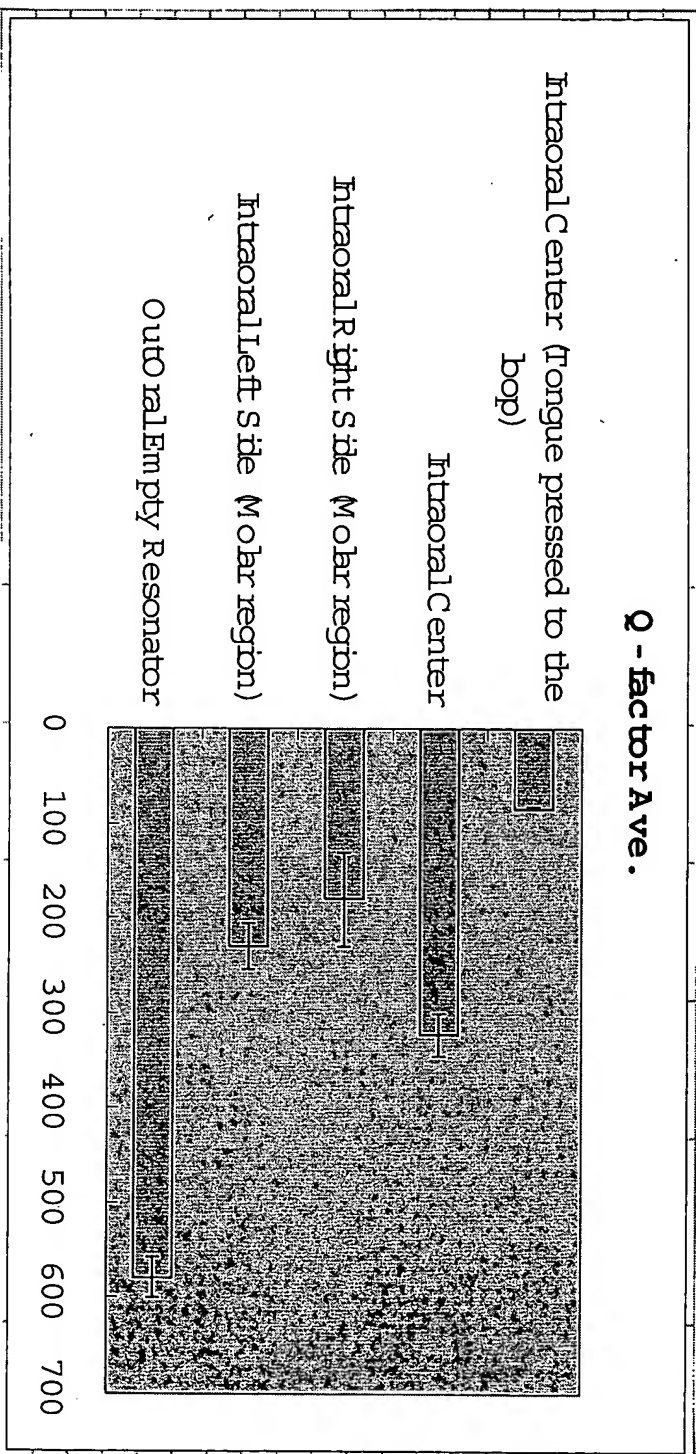


Fig. 27B

Irradiated Tooth (3000 cGy)

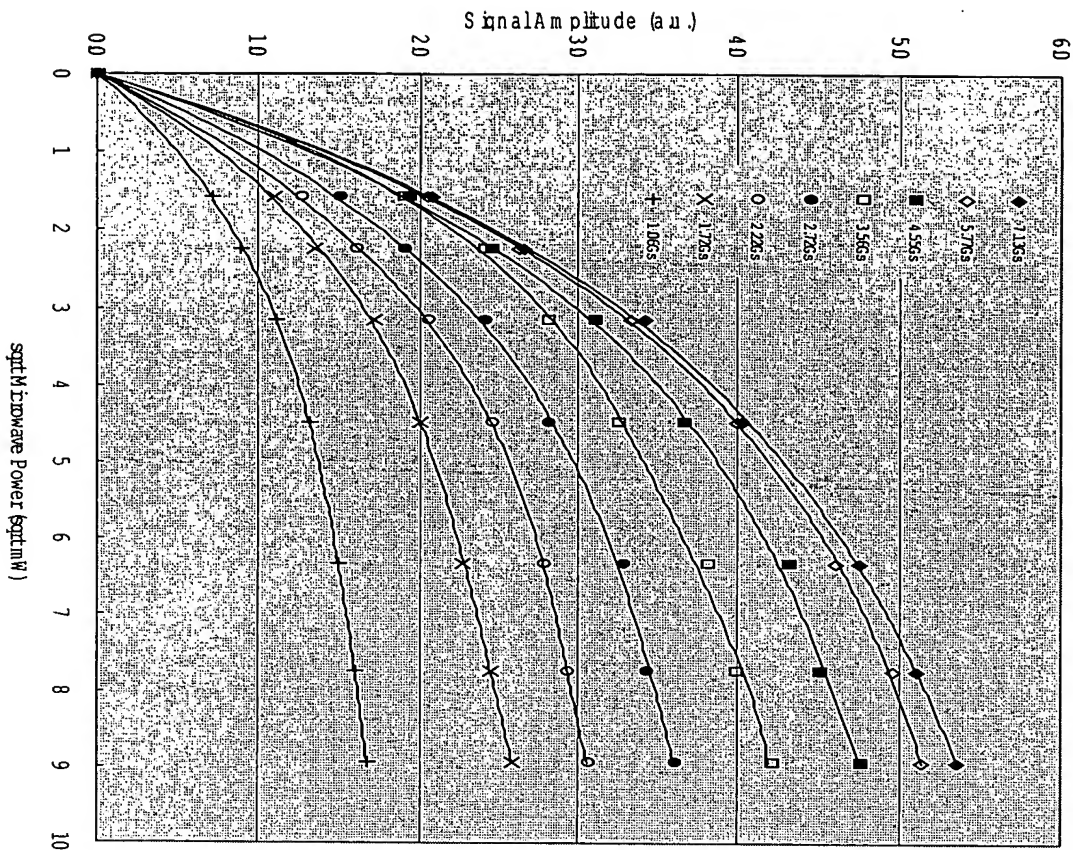


Fig. 28A

Non-Irradiated Tooth

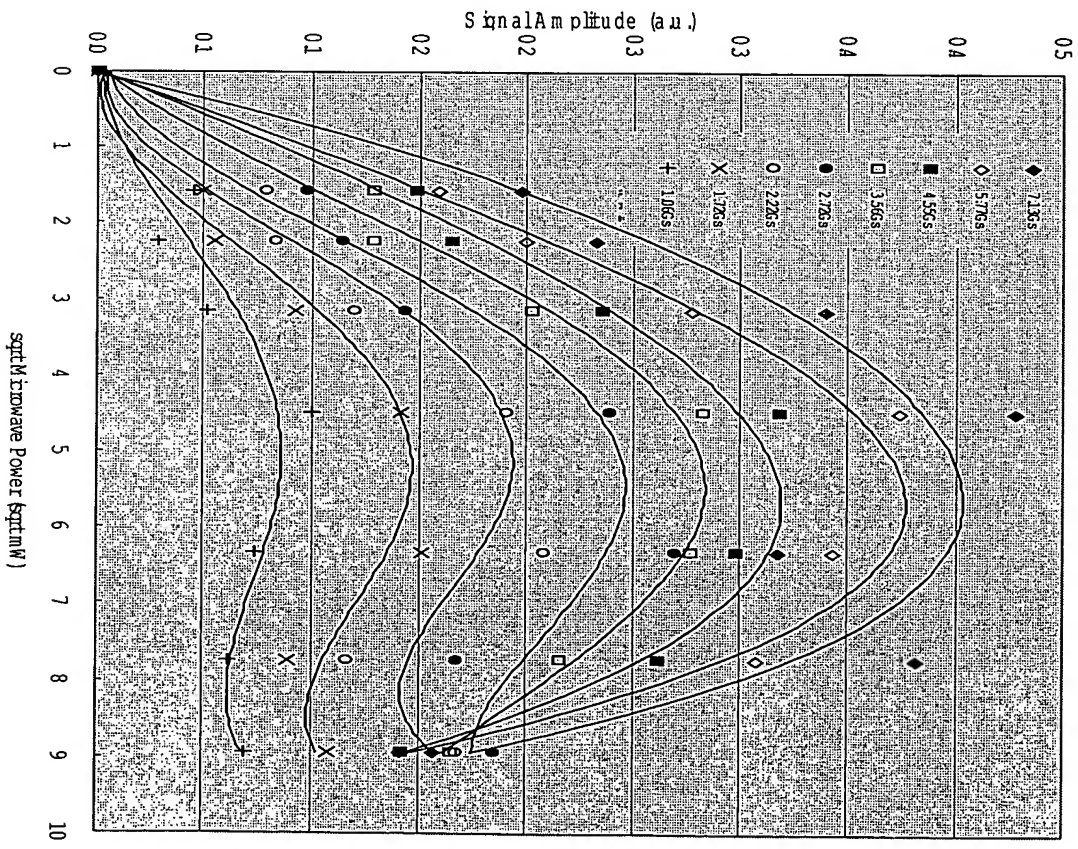
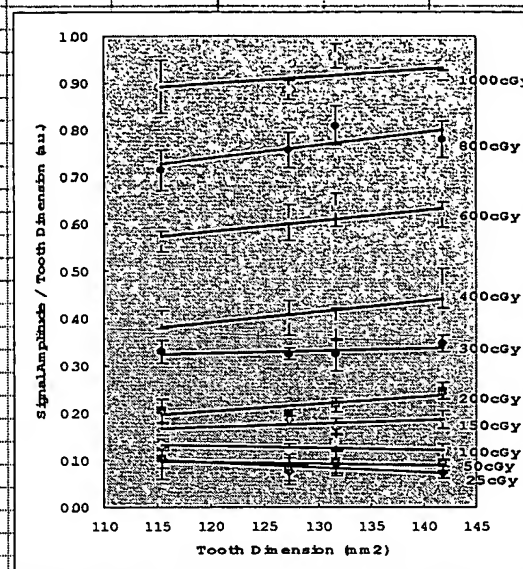
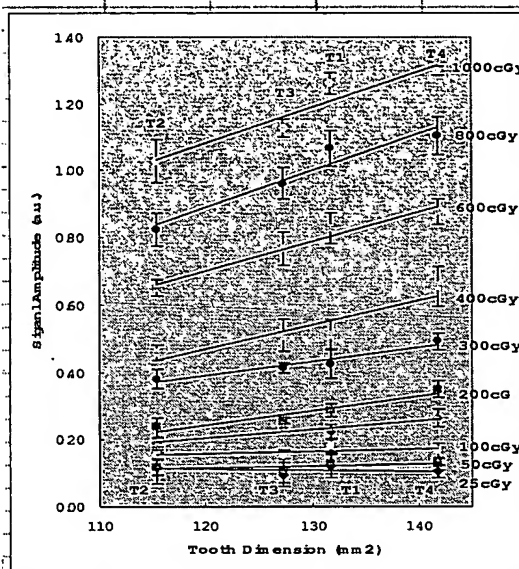


Fig. 28B

Fig. 29A

Fig. 29B

Normalized by tooth dimension (a*b)



Normalized by (a*b)^(6/5)

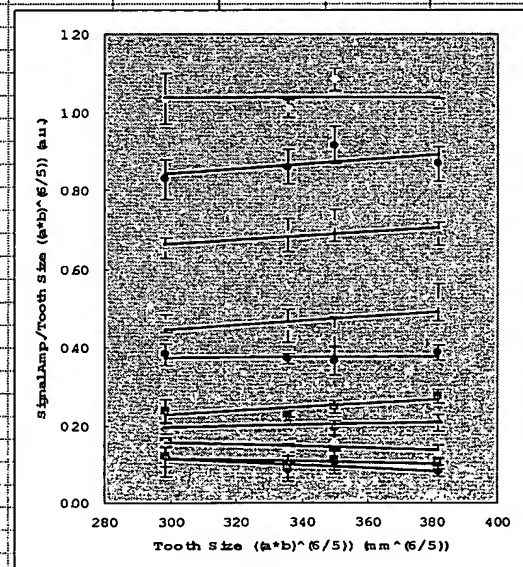
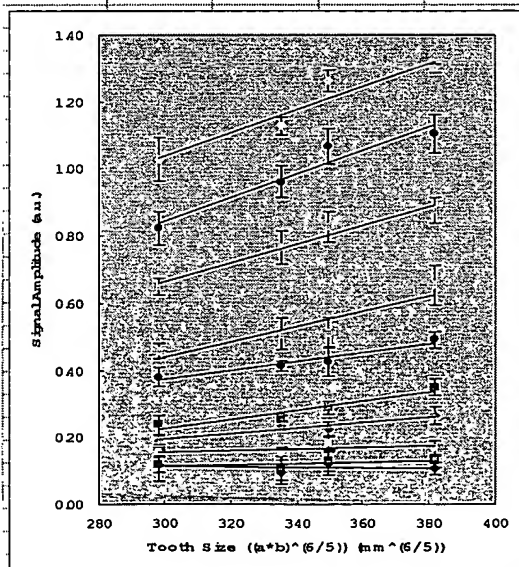


Fig. 29C

Fig. 29D

EPR Spectra of Human Tooth at L-Band

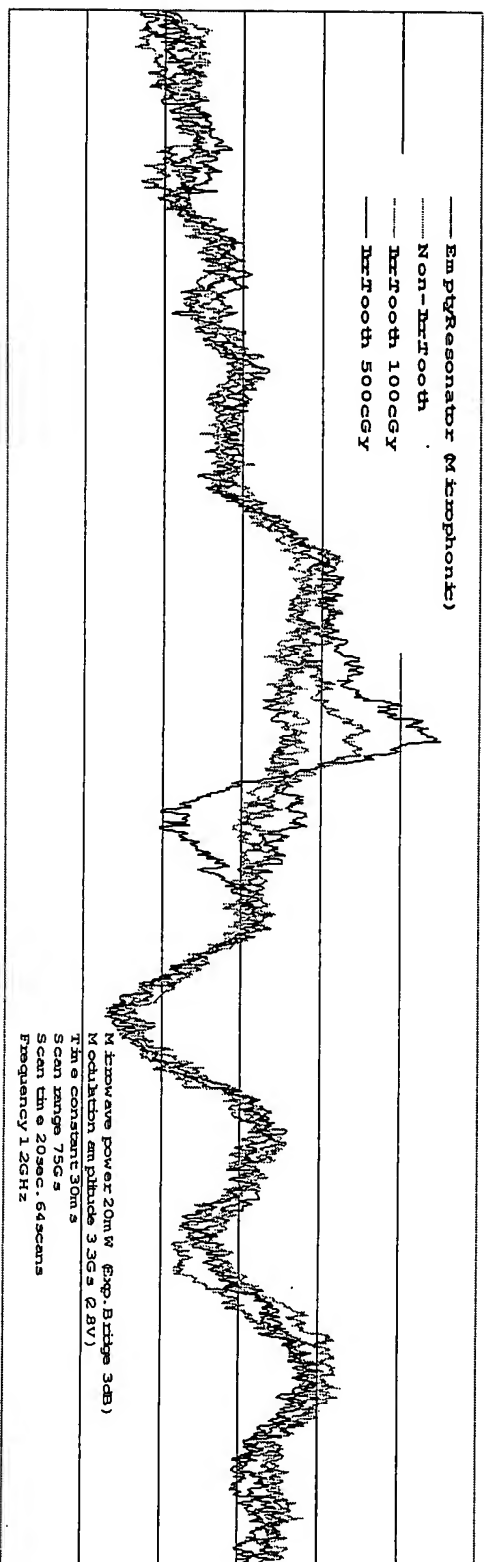


Fig. 30A

EPR Spectra of Human Teeth at L-Band
(After Subtraction)

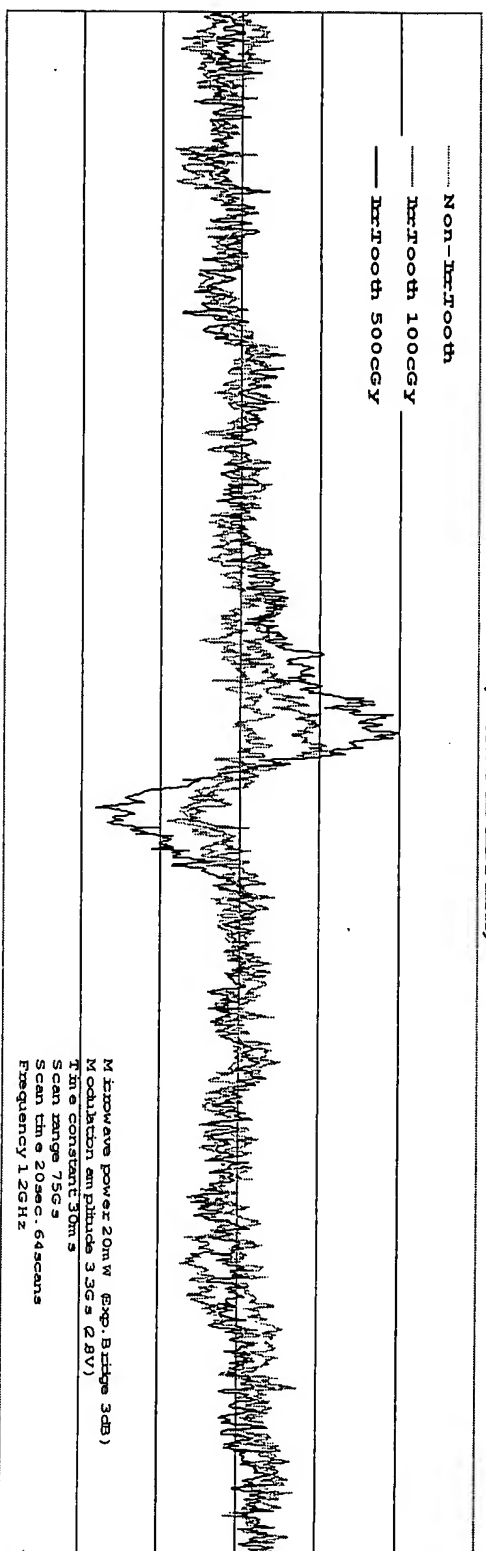


Fig. 30B

Fig. 31A

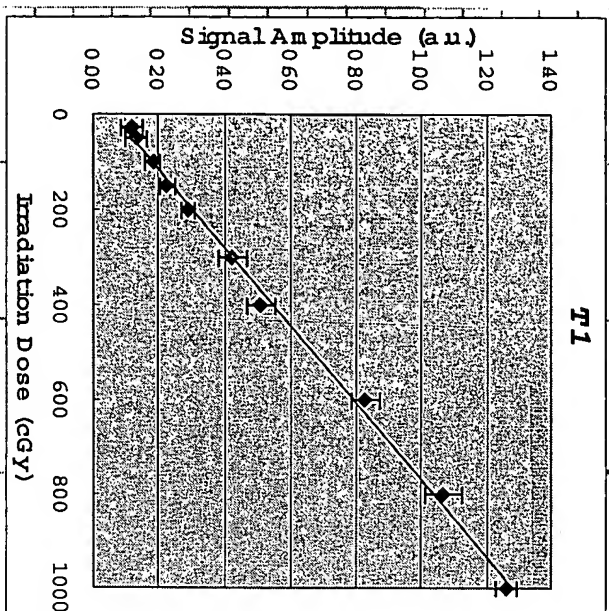


Fig. 31B

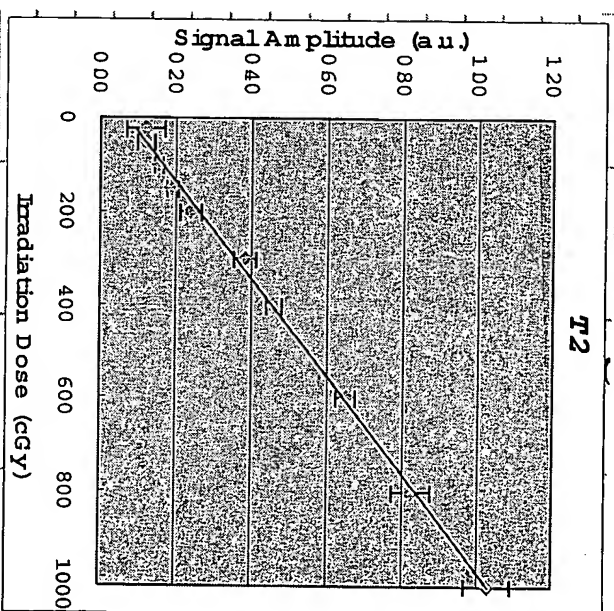


Fig. 31C

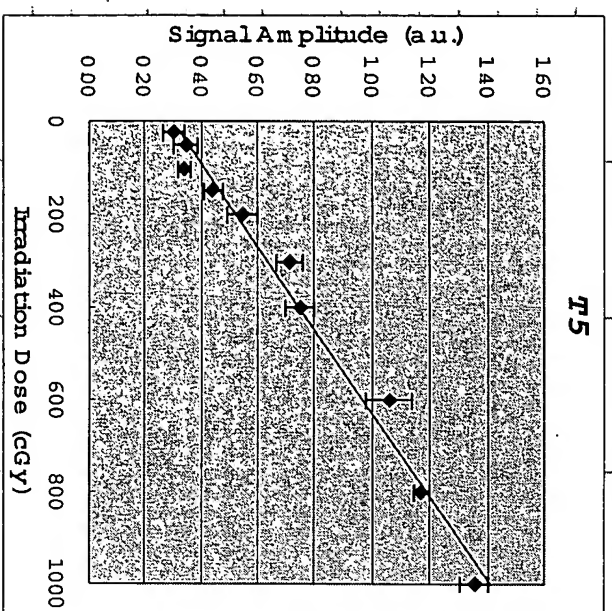


Fig. 31D

